

**UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION**

IN RE: STEEL ANTITRUST LITIGATION

Case No. 08-cv-5214

**THIS DOCUMENT RELATES TO
ALL DIRECT PURCHASER ACTIONS:**

Hon. James B. Zagel

Standard Iron Works v. ArcelorMittal et al.,
Case No. 08-cv-5214

Wilmington Steel Processing Co., Inc. v.
ArcelorMittal, et al., Case No. 08-cv-5371

Capow, Inc. d/b/a Eastern States Steel v.
ArcelorMittal, et al., Case No. 08-cv-5633

Alco Industries, Inc. v. ArcelorMittal, et al.,
Case No. 08-cv-6197

Gulf Stream Builders Supply, Inc. v.
ArcelorMittal, et al., Case No. 10-cv-4236

DEFENDANTS' PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

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INTRODUCTION

Before the Court is the Direct Purchaser Plaintiffs' (Plaintiffs') motion to certify a purported class combining thousands of diverse purchasers of hundreds of different steel products with enormous variation in supply, demand, production, prices, and profitability. Plaintiffs bear the burden of proving: (1) that common evidence exists to prove impact on the entire class, (2) that a common methodology exists to measure each class member's damages, and (3) that their methodology of proving impact and damages "fits" their model of liability and "measures[s] only those damages attributable to that theory." *Comcast Corp. v. Behrend*, 133 S. Ct. 1426, 1433 (2013); *Parko v. Shell Oil Co.*, 739 F.3d 1083, 1086-87 (7th Cir. 2014).

Plaintiffs' theory of liability, and the premise of their case on class certification, is that Defendants cut the supply of liquid steel at the furnace level, thereby impacting the price of hundreds of finished steel products that are bought and sold in many separate and distinct economic markets. But Plaintiffs' theory unraveled at the class certification hearing. They were forced to admit they had offered no method to prove that Defendants cut the supply of any products in the proposed class below levels that would have existed absent the alleged conduct (but-for levels). In fact, Defendants demonstrated at the hearing that production of several major steel product categories increased throughout the proposed class period. This is consistent with Plaintiffs' experts' testimony that Defendants had no economic incentive to reduce production of higher-margin steel products, even assuming the alleged conspiracy.

With no common methodology to prove that production of the hundreds of products in the proposed class was "cut," or by how much, Plaintiffs resorted to three shortcuts. First, Plaintiffs' economist, Professor Solow, purported to offer a structure-conduct-performance analysis that he admitted does not prove impact. Second, Solow proposed to spread the unestablished "production cuts" across the class using a supply side substitution theory that

requires equalization of profit margins and proof of costless, quick shifting among products. But Solow did none of the work necessary to determine whether the products in the proposed class are supply side substitutes. He did not analyze the relative margins of the finished products in the proposed class, which would have converged if they were in fact supply side substitutes; if he had, he would have found them to be different and diverging. Nor did he study whether Defendants actually shifted production, much less whether they could do so “costlessly” and quickly, as his academic treatise prescribes. In fact, Defendants’ abilities to shift among products were limited by the capabilities of their respective mills, and any possible shifting was both expensive and time consuming.

Third, Plaintiffs rely on Dr. McClave’s dummy variable damages model. But by his own admission, McClave’s model cannot calculate any individual customer’s overcharge. His model estimates impact only on an aggregated basis and theorizes elevated prices only by using the lower prices of the Great Recession as a benchmark. And by ignoring important market determinants of price, McClave’s model falsely attributes price effects to a conspiracy. In short, McClave’s model contains fundamental flaws that render it incapable of proving either impact or damages classwide and flunked several standard specification tests as a result.

These failings doom class certification. Plaintiffs cannot meet the Supreme Court’s mandate that plaintiffs “tie each theory of antitrust impact to a calculation of damages” and “show that the case is susceptible to awarding damages on a classwide basis.” *Comcast*, 133 S. Ct. at 1433, 1431 n.4 (internal quotation marks omitted). The “rigorous analysis” mandated by the Supreme Court reveals that Plaintiffs have failed to satisfy their burden to show that common issues predominate as required by Rule 23. *See Wal-Mart v. Dukes*, 131 S. Ct. 2541, 2551 (2011). Rigor at the class certification stage is of utmost importance to defendants’ abilities to

defend themselves, *see id.* at 2561, and to avoid forcing innocent defendants to settle under the pressure of huge alleged classwide liability. *See Parko*, 739 F.3d at 1086.

Defendants ArcelorMittal S.A. and ArcelorMittal USA LLC, United States Steel Corporation, Nucor Corporation, Steel Dynamics, Inc., and SSAB Swedish Steel Corporation (collectively “Defendants”) respectfully submit their proposed findings of fact and conclusions of law in connection with Plaintiffs’ motion for class certification.

FINDINGS OF FACT

I. THE PARTIES AND THE PROPOSED CLASS

A. Plaintiffs

1. The named plaintiffs, Standard Iron Works, Alco Industries, Inc., Gulf Stream Builders Supply, Inc., Wilmington Steel Processing Co., and Capow, Inc. d/b/a Eastern States Steel, each buy and sell steel products for a niche within a diverse range of customer uses, such as in residential and non-residential construction, pressure vessels, elevator counterweights, or U.S. Department of Defense applications like Mine-Resistant Ambush Protection vehicles. (JX-298 at 75:13-76:1; JX-312 at 119:7-121:10; JX-345 at 31:8-32:11, 32:17-33:19; JX-324 at 86:15-89:16, 96:20-97:20, 163:10-20; JX-276 at 23:19-24:7, 24:18-28:16, 35:9-16, 36:15-18.) Each bought a limited number of specific steel products for a particular customer order, some of which could be made only by a single defendant. (JX-312 at 119:7-21, 131:11-132:11, 168:12-23; JX-298 at 142:12-143:5, 144:12-145:22; JX-345 at 56:23-57:17, 60:18-61:5, 99:22-100:8; JX-324 at 191:22-192:2, 207:12-209:21, 199:7-14, 163:10-20, 173:21-174:5, 174:13-175:4, 211:5-213:3, 251:16-252:14, 262:3-10.)

B. Defendants

2. Arcelor Mittal, U.S. Steel, Nucor, Gerdau Ameristeel Corporation (Gerdau), SDI, AK Steel Holding Corporation (AK Steel), SSAB, and Commercial Metals Company (CMC)

among them operated 14 mills with basic oxygen furnaces (BOF) and 46 mills with electric arc furnaces (EAF). (DX-002.) BOF mills use a basic oxygen furnace to convert iron ore, coke, and limestone into liquid iron that is then cast into steel. (DX-003 at Attach. 1 p.12.) EAF mills use an electric arc furnace to melt different grades of solid scrap into liquid steel. (*Id.* at Attach. 1 p.13; Tr. II 446:14-23.) No defendant can produce all products included in the proposed class, and the designs of Defendants' various mills limit the products that can be produced in each of those mills. (DX-002 (presenting additional details of products that Defendants' mills can and cannot produce and demonstrating that each mill was designed to produce a defined subset of products within broader flat and long product categories).)

C. The Proposed Class

3. Plaintiffs seek certification of a class of direct purchasers of steel products running from April 1, 2005, through December 31, 2007. They allege that defendants reduced production only in two short periods—June/July of 2005 and October/November of 2006—during a 33-month class period. (*See* JX-071 at 7.) Direct purchasers include purchasers who negotiated pricing contracts during the class period and received delivery during the class period as well as those who negotiated contracts prior to the class period and both received delivery during the class period and received adjustments to their contract price during the class period. (JX-303 at 2.) Plaintiffs define “Steel Products” as including all products derived from raw carbon steel, but they then exclude many products from the class, as explained below. (*Id.*)

4. Plaintiffs gerrymandered the proposed class products, class period and class definition to find a model that allegedly supports their case.

5. Plaintiffs' complaint, filed September 12, 2008, alleged a class period spanning January 1, 2005, to the present. (JX-030 ¶ 1.) Their motion for class certification alleges a

shorter conspiracy period beginning later, April 2005, and ending before the Great Recession at December 2007. (JX-303 at 2.)

6. Plaintiff's complaint originally alleged production cuts that took place in mid-2005, late-2006, mid-2007 and mid-2008. (JX-030 ¶¶ 71, 123, 156, 159.) But Plaintiffs eliminated the last two alleged production cuts from their motion for class certification. (JX-071 at 7.)

7. The class definition alleged in the complaint included "all products derived from raw steel," including special bar quality (SBQ), wire rod and tin mill products. (JX-030 ¶ 21.) But in their motion for class certification, Plaintiffs modified the class definition to exclude "certain products not fairly encompassed by Plaintiffs' theory of the case," including SBQ, wire rod and tin products. (JX-071 at 21-22 n.9.) Specifically excluded from the definition of "Steel Products" in Plaintiffs' Motion for Class Certification are: "stainless steel; grain-oriented electrical steel; tin mill products; clad plate (i.e., nickel, stainless or copper clad plate); steel pipe and other tubular products; 'special bar quality' products; wire rod and other wire products; grinding balls; fabricated rebar products; fabricated steel joist, decking, fence posts and other fabricated building products; welded steel blanks; and steel products purchased under toll processing agreements." (JX-303 at 2.)

8. Plaintiffs' economic expert, Professor Solow, admits that he does not know why these products were excluded. (Tr. I 151:25-152:9; JX-056 at 115:7-11.) Plaintiffs' steel industry expert, Dr. Wright, testified that he saw no "common trait" among the excluded products and did not advise the Plaintiffs in any way with respect to the class definition. (Tr. I 229:19-230:15.) Plaintiffs' statistical expert, Dr. McClave, testified that his firm worked with

Plaintiffs' counsel in determining which products to exclude, but he claimed he did not know why they excluded any specific products. (Tr. II 379:16-19.)

9. Plaintiffs claim that they excluded from the class "marginal" products, or products that originated in different furnaces. (Tr. I 49:18-25.) But Glenn Pushis, a steel industry veteran at SDI, testified that he could see no reason why Plaintiffs would exclude SBQ, which is not a marginal product, but comprised 95% of SDI's Pittsboro mill's production. (Tr. II 460:13-461:21.) Pushis testified that SBQ originates from the same furnaces as the included products. (Tr. II 460:24-461:11.) Lisa Roudabush, a U.S. Steel executive, confirmed the same is true for tin mill products, also excluded from the class. (Tr. II 523:2-5.)

II. THE PROCEEDINGS

10. The Direct Purchaser Plaintiffs filed their Motion and Memorandum in support of Class Certification on May 24, 2012. Defendants filed their Opposition to the Motion for Class Certification on February 28, 2013. Plaintiffs filed their Reply on October 15, 2013.

11. An evidentiary hearing took place over three days—March 5, March 6, and April 11, 2014.

12. Plaintiffs offered the testimony of: John L. Solow, Professor of Economics at the University of Iowa, as an expert on "economics, industrial organization and econometrics" (Tr. I 77:8-13), Jeryl K. Wright as an expert in "steel making, steel processing, steel plant processed layouts, steel customer service and quality system management" (Tr. I 206:11-17, 261:10-16), and James T. McClave as an expert in "statistics and econometrics" (Tr. I 269:23-270:6).

13. Defendants offered the testimony of: Jerry A. Hausman, the MacDonald Professor of Economics at the Massachusetts Institute of Technology, as an expert in "economics and econometrics" (Tr. III 13:25-14:4), and two steel industry executives, Glenn A. Pushis, Vice

President and General Manager of SDI's Flat Roll Division, and Lisa Roudabush, U.S. Steel's Managing Director—Product Quality North American Flat Rolled Operations.¹

14. By agreement of the parties, Defendants also offered the testimony of Brian G. Thomas, the C.J. Gauthier Professor of Mechanical Engineering and Director of the Continuous Casting Consortium at the University of Illinois at Urbana-Champaign, as an expert in metallurgy, steel processing, and steel manufacturing, whose testimony was submitted through an affidavit and a Revised Appendix to his expert report. (*See* DX-003 (Expert Report); DX-106 (Affidavit); DX-002 (Revised Appendix); Tr. III 5:16-19.) Thomas adopted the report of Defendants' previous expert, Kent D. Peaslee, Curators Distinguished Teaching Professor of Metallurgy at the Missouri University of Science and Technology, who was also an expert in metallurgy, steel processing, and steel manufacturing. (*See* DX-003.)

15. Defendants also submitted through her report the expert opinion of Jennifer A. Hillman, a former Commissioner at the United States International Trade Commission, on international trade law and international trade remedies. (JX-004.)

16. Both Plaintiffs and Defendants offered, and the Court admitted, exhibits for the hearing and designations from the deposition transcripts of the named plaintiffs. (*See* Tr. III 181:11-183:3.)

17. Plaintiffs and Defendants filed with the Court all demonstratives used during the evidentiary hearing. (*See* Tr. III 182:11-18; Dkt. # 471; Dkt. # 472.)

¹ The parties stipulated to the tendering of each expert, which the Court accepted. (*See* Tr. I 77:8-13, 206:11-17, 261:10-16, 269:23-270:6; Tr. III 13:25-14:4.)

**III. PLAINTIFFS OFFERED NO CLASSWIDE METHOD OF PROVING
“PRODUCTION CUTS.”**

**A. Plaintiffs’ Case and Class Certification Motion Are Premised on
Coordinated “Production Cuts.”**

18. The crux of Plaintiffs’ allegations in this case is that Defendants’ executives conspired to cut overall steel production in the United States during two short episodes within a 33-month period. They allege that executives made public statements regarding production “discipline” at trade association meetings and during earnings calls with stock analysts, which served as signals to other executives to cut production to inflate steel prices artificially above competitive levels. (*See, e.g.*, Tr. I 8:8-9:11; Tr. III 243:22-245:14; PX136.) Plaintiffs’ counsel and experts referred to coordinated production cuts hundreds of times throughout the presentation of their evidence in support of class certification.

19. These alleged coordinated production cuts are essential to Plaintiffs’ theory of class certification. Plaintiffs’ theory of antitrust impact is that if you “[c]ut supply, [] price goes up.” (Tr. I 12:17-18.) Solow was retained in this case “to determine whether economic proof is available to establish antitrust impact on a class-wide basis.” (Tr. I 136:8-11.) Solow’s conclusions about impact depend on his premise that aggregate steel output was in fact curtailed on an industrywide basis during the relevant period: “It is equally clear from the defendants’ production data that raw steel output in fact was curtailed on an industry wide basis during the relevant period.” (JX-009 ¶ 49.) He testified that impact can be shown for class members only where overall steel production was lower than it otherwise would have been:

- Q: And it’s your opinion that antitrust impact can be shown where overall steel production is lower than it otherwise would have been absent the alleged conspiracy, correct?
- A: I believe it has to, yes.

(Tr. I 136:12-15; *see also* JX-010 ¶ 42.)

B. Plaintiffs Have Neither Analyzed Whether Defendants Actually Cut Production nor Offered a Methodology by Which Production Cuts Could Be Determined at Trial.

1. Solow Made No Attempt To Determine But-For Production and Confirmed That It *Cannot* Be Measured Through Common Proof.

20. Despite testifying that overall steel production “has to” be lower than the but-for level of production to show antitrust impact (Tr. I 136:12-15), Solow did not even attempt to measure whether aggregate steel production—let alone production of any individual steel products—was lower than it otherwise would have been absent the alleged conspiracy:

Q: You have not tried to quantify the extent to which production was cut from what it otherwise would have been, correct?

A: That is correct.

Q: So you have not determined a but-for production level?

A: No.

(Tr. I 136:2-7.)

21. Solow testified that he made no attempt to determine the but-for world at all because “that was Dr. McClave’s job.” (Tr. I 151:11-13.)

22. Solow simply relied on a chart created by Plaintiffs’ counsel (the Fine Kaplan Graph) purporting to show “cuts” in overall steel production across all finished steel products at two points in a 36-month period. (Tr. I 125:13-14, 126:7-127:20, 130:12-131:9; Dkt. # 471-2 at 2.)

23. Though Plaintiffs’ lawyers inserted arrows labeled “Coordinated Production Cut” in two places where aggregate production trended down (Tr. I 127:11-20), the Fine Kaplan Graph says nothing about “production cuts” at all, even in the aggregate. The most Plaintiffs can tell from the Fine Kaplan Graph is that aggregate steel production within the 36-month period went both up and down. (Tr. I 129:16-130:2; Dkt. # 466.) It says nothing about what production levels would have been absent the alleged conspiracy.

24. Hausman determined, and Solow confirmed, that aggregate steel production also went up and down throughout the thirty year period between 1980 and 2010, with several dips of greater magnitude occurring during those time periods. (*See* Tr. III 32:14-18; JX-002 at 46; Tr. I 132:14-25, 134:5-11; Dkt. # 471-6 at 8.)

25. Solow's analysis fails to answer the question, "cut below what?" His analysis consists solely of a visual inspection of the subtrahend (actual production), without any determination of the minuend (but-for production). Without but-for production from which to subtract actual production, any notion of "production cuts" is meaningless. (*See* Tr. I 136:22-139:22.)

26. Another demonstrative chart used during Solow's direct examination (the "Production Cut" Chart) similarly fails to answer the question "cut below what?" (*See* Tr. I 96:11-98:24; PX137 at 14-17.) The chart simply lists production facilities, the broad categories of products made at those facilities, and the conclusion that they cut production. Solow's testimony revealed that he simply indicated "Yes" in a column labeled production cuts where production at a facility went down at any point during the alleged class period. (Tr. I 136:22-137:6, 199:15-200:2.) Solow admitted he did not do any statistical analysis in making that determination. (Tr. I 199:24-200:2.)

27. Solow also made no "attempt to isolate the causes of the[] dips in production" nor any attempt to determine if the dips in production were due to "any causes other than the alleged conspiracy." (Tr. I 134:19-22, 135:8-11.) For example, Plaintiffs' "evidence" fails to control for changes in economic conditions and fails to suggest anything more than that the Defendants produced to orders and responded to reduced demand for certain products. (*See, e.g.*, Tr. I 142:21-143:1 (Solow's understanding that producers reduced production "[t]o match supply to

demand”).) *Compare* Dkt. # 471-6 at 6 (demonstrating that demand for rebar, cut-to-length plate and structural products increased throughout the class period) *with* Dkt. # 471-6 at 7 (demonstrating that aggregate production declined during certain months of the class period).) Solow admitted that demand was declining in the class period and that “producers cut production to meet demand.” (Tr. I 142:21-143:1.) Solow further testified that adjusting production to meet demand is sensible business discipline. (Tr. I 176:16-19; *see also* JX-062 at 206:20-207:3 (Wright characterizing “adjusting output to meet demand” as “sensible business discipline”).)

28. The “Production Cut” Chart also omits major product categories, like structural beam (which is nearly 40% of the long steel category by sales), thereby failing to account for whole sections of the products encompassed by the proposed class and the proposed class members who purchase them. (*See* PX-137 at 14-17.) Solow does not dispute that production of structural beam, as well as rebar and plate, continued to increase throughout the relevant period. (*See* Tr. I 146:2-24 (structural), 147:14-17 (rebar), 148:7-19 (plate); Dkt. # 471-9 at 7; *see also* Tr. I 146:25-147:2, 148:7-9 (Solow did not look at production levels of rebar or plate); Dkt. # 471-4 at 10 (SDI’s flat roll production was higher from 2005-2007 than any other years 2002-2009); Dkt. # 471-4 at 11 (SDI’s structural production increased every year 2005-2007).)

29. Solow testified that he does not know, and did no work to determine, whether the alleged conspiracy would result in a reduction of the production level of any particular finished product. (Tr. I 143:14-144:3; Dkt. # 466.) Solow confirmed that the Fine Kaplan Graph “doesn’t tell you what the production was for any of the individual steel products in the case.” (Tr. I 140:8-11.)

30. He also admits that to answer the question whether the production of a particular finished product was reduced below but-for levels, he would need to look at both supply and

demand for each individual steel product. (Tr. I 143:2-6.) Solow expects that supply and demand would differ across products, though he did no formal analysis of supply and demand for any finished steel products. (Tr. I 145:11-16, 142:12-20; Dkt. # 466.) This testimony affirmatively establishes that production cuts—and therefore impact and damages—cannot be proven through a common methodology, but instead must be determined on a product-by-product basis.

2. McClave Established Neither But-For Production nor a Methodology To Measure It at Trial.

31. Solow testified that determining the but-for world was “McClave’s job.” But McClave testified that he did not analyze the but-for level of production, either:

Q: Did you do any modeling to determine what the but-for competitive level of production would’ve been?

A: No, that’s not germane to a damage analysis. No, I didn’t.

(Tr. II 388:13-15.)

32. McClave admitted he did not know if any Defendant increased or decreased production during the class period, or if Defendants’ respective production totals even moved in the same direction. (Tr. II 388:20-389:2.) McClave did not attempt to measure directly either any alleged “production cuts” or the effect of those cuts. (*Compare* Tr. II 302:22-304:10 (McClave claiming that including production would “taint” the model) *with* Tr. III 58:23-59:10 (Hausman explaining that a standard econometric method exists to model the effects of production cuts, and including production would not undermine the model).)

C. Defendants’ Executives’ Statements Regarding Discipline Are Not Common “Proof” of Impact.

33. Plaintiffs rely on public statements by certain of the Defendants regarding post-consolidation production discipline cited in Plaintiffs’ Complaint as “common proof” of an alleged conspiracy. In his opening statement, Plaintiffs’ counsel stated that the supposed

“common evidence” justifying class certification in this case consists of four things: (a) Defendants met each other at trade association and other industry meetings; (b) Defendants’ executives made public statements lauding a new era in the steel industry for exercising discipline; (c) aggregate production of steel products moved up and down during the class period; and (d) Defendants’ executives made public statements that discipline results in more stable prices. (Tr. I 8:8-9:19; PX136; *see also* Tr. III 243:22-245:14.)

34. Solow admitted that these statements say nothing about whether the production level of any particular steel product was different than it otherwise would have been absent the alleged conspiracy. (Tr. I 173:21-174:1.)

35. Even in the aggregate, the evidence presented at the evidentiary hearing is contrary to what Plaintiffs claim can be inferred from these statements. For example, the “pint of blood” statement by SDI’s then-CEO Busse—in response to a question at a quarterly earnings call about the effect of a drop off in orders during one month of that quarter—says nothing about classwide impact. (Tr. II 480:3-484:9.) Nor do comments of other executives regarding industry “discipline” in the context of structural changes in the steel industry through consolidation, as alleged in the Complaint. (Tr. II 472:21-473:25, 479:15-478:8.)

36. I find that Plaintiffs have failed to establish production cuts, either in the aggregate or for any individual steel products that are actually purchased and sold. Plaintiffs also have failed to offer a common methodology by which to measure the alleged production cuts at trial. Without a common method of proving production cuts—on which Plaintiffs premise their case—no common proof of impact or damages is possible.

IV. SOLOW'S ANALYSIS CANNOT BE USED TO PROVE IMPACT ON ANY INDIVIDUAL CUSTOMER.

37. Without the missing link—a classwide method of proving “production cuts”—Solow’s opinions lack the foundation he claims is necessary for common proof of impact. (Tr. I 136:12-15; *see also* JX-010 ¶ 42.) In any event, Solow’s opinions could not be used to establish classwide impact because they fail for the independent reasons below.

A. The Undisputed Record Belies Any Classwide Impact of “Production Cuts.”

38. Plaintiffs’ theory of antitrust impact is that if you “[c]ut supply, [] price goes up.” (Tr. I 12:17-18.) Solow first opined this was so because: “Raw steel . . . is a homogeneous product or commodity.” (JX-009 ¶ 28.)

39. In the face of overwhelming evidence to the contrary, Solow now denies that he ever held this opinion:

Q: And now you no longer believe that there is a single commodity substance called raw steel, do you?

A: I don’t think I have ever believed that there was a single commodity substance called raw steel.

Q: Okay. I don’t want to quibble about that. You don’t now?

A: I don’t know. I don’t think I ever have.

(Tr. I 155:21-156:1.)

40. Solow now agrees that there is no single substance, “raw steel,” that is a commodity input to all steel products:

Q: And you agree, don’t you, that different batches of steel have different chemical properties?

A: Absolutely.

(Tr. I 156:2-4.)

41. The Parties also agree that members of the alleged class do not buy “steel,” but purchased a variety of specific steel products with different grades, chemistries, specifications, and end uses. (Tr. I 12:8-13.) As Solow conceded, determining whether the supply of the

individual products purchased by proposed class members was “cut” below competitive levels would require examination of both supply and demand, which he expects would differ across products (Tr. I 143:2-6, 145:11-16.)

42. Having abandoned their “raw steel” theory, and with no classwide method of proving at trial that the production of each proposed class product decreased below competitive levels during the class period, Plaintiffs cannot avoid the undisputed record before the Court showing that any alleged “production cuts” would not have impacted equally all products within Plaintiffs’ proposed definition.

1. The Parties Agree that Producers Faced with a Production Constraint Would Not Reduce Production of Higher-Margin Products.

43. Plaintiffs’ industry expert, Wright, testified that “[i]f you have a choice to wear out your equipment with high margin products or wear it out with low margin [products] you always will pick the high margin products as long as you don't have some other contractual constraint overriding it.” (JX-062 at 188:19-24.) Solow agreed that “the economically rational thing to do [is] to make more high-margin products and less low-margin products” (Tr. I 163:17-20.) Hausman confirmed that an alleged output reduction “would not impact all products. . . . [P]roducers would decrease low margin, not high margin products.” (Tr. III 19:18-24.)

44. Defendants’ unrebutted evidence shows that margins differed significantly across products, and that there were higher-margin products that Defendants had no incentive to reduce at any time during the proposed class period. Industrywide ITC profit margin data demonstrate that cut-to-length plate was more profitable than hot rolled sheet and corrosion resistant sheet throughout the entire proposed class period (Tr. III 39:15-40:8; Dkt. # 471-6 at 12); ArcelorMittal profit margin data demonstrate that plate products were significantly more

profitable to produce than cold rolled sheet throughout the class period (Tr. III 36:24-38:15; Dkt. # 471-6 at 10; Dkt. # 471-9 at 9); and Nucor's profit data demonstrate that structural beam was significantly more profitable than rebar throughout the period (Tr. III 38:22-39:12; Dkt. # 471-6 at 11; Dkt. # 471-9 at 9).

45. Defendants' evidence of significant differences in profit margins for different products is un rebutted. Plaintiffs offered no analysis of profit margins at all. (Tr. I 163:17-164:2.)

2. The Realities of Steel Making Belie Classwide Impact.

46. The crux of Solow's theory of impact is that all steel products originate in a furnace. (Tr. I 84:16-86:7; *see also* JX-010 ¶¶ 2(a), 19.) Solow misunderstands and oversimplifies steel production.

47. Each of Defendants' furnaces is connected to a rolling mill. The liquid steel output of one furnace is rolled at the facility to which it is connected. (Tr. II 465:24-467:14.) The production capabilities of each facility are limited to certain categories of end products. (Tr. I 238:19-239:1; DX-002; DX-001 ¶¶ 57-58, 63, 65.) A reduction in the output of one furnace could affect, at most, only the products that could be produced at that facility. For example, SDI's Pushis testified that a reduction in furnace production at Butler, which did not produce long products, would have no effect on the total output of structural beams, which SDI produced at Columbia City, or the supply of sheets for exposed automotive panels generally, which SDI could not produce at all. (Tr. II 468:3-469:19; *see also* Tr. I 255:16-256:2; DX-001 ¶¶ 57-58, 63, 65.)

48. Pushis also testified that a reduction in the output of a furnace may not affect even the production levels of products made at the rolling mill connected to the furnace. For example, rather than the furnace, the cold rolled mill was the bottleneck at Butler, and the rolling mill was

the bottleneck at Columbia City. (Tr. II 468:23-469:12 (cold rolled); 470:8-21 (Columbia City).) For those facilities, more molten steel would not have resulted in more finished output. (*See* Tr. II 468:23-469:12 (Pushis explaining that Butler's cold rolled mill could run at total capacity even if the mill reduced its furnace capacity to 70%); Tr. II 470:8-21 (testifying that during the class period, SDI's structural rolling mill could produce at full capacity even if SDI reduced the furnaces at SDI's structural mill by 50%).)

49. Further, as Plaintiffs' experts concede, steel purchasers are not all similarly situated because some purchasers of certain products negotiated long-term contracts. (*See* Tr. I 168:19-21, 249:20-25.) These long-term contracts limit a manufacturer's ability to reduce production of certain steel products. (JX-062 at 188:10-24.)

3. Imports Differ Among Steel Products.

50. Solow's agreement that imports vary among finished steel products belies his contrary assertion that imports can be measured on a classwide basis:

Q: And you agree that import-export levels are different for different finished steel products, right?

A: I do.

(Tr. I 178:23-25.) Hausman's testimony also confirmed the "large amount of variation in imports among steel products." (Tr. III 46:14-24; Dkt. # 471-6 at 16; JX-004 ¶ 14.)

51. Hausman found that the quantity of imports was the most important factor affecting the price of steel products in the ITC proceedings on which Solow otherwise purports to rely. (Tr. I 178:20-22.) Solow himself acknowledged the importance of imports in his report. (*See* JX-009 ¶ 24 (finding that imports account for 14-22% of product sales in the U.S. from 2005 to 2007); *see also* JX-002 at 10 (Hausman stating that "[i]mports have typically accounted for around 25% - 33% of consumption over recent decades for different steel products, while for certain products, imports can be greater").) He also acknowledged that "[i]f a cartel's

restrictions of domestic supply and the corresponding price increases lead to large offsetting increases in supply from abroad attracted by the higher prices, the success of the cartel will be constrained.” (JX-009 ¶ 24; Tr. I 89:21-25.) But Solow did no statistical analysis of the quantity of imports for different steel products in this case. (Tr. I 178:20-179:21.)

52. Solow also confirmed that his claimed import barriers would vary by product and origin: duties “apply to some products imported from some countries and didn’t apply to other products imported from other countries” (Tr. I 186:15-22); shipping costs went up for some products and down for others during the class period (Tr. I 186:23-187:11, 187:18-20); and exchange rates varied by country (Tr. I 187:21-188:4; JX-004 ¶ 9(a), (d), (e).)

53. In addition to imports, Solow ignored other sources of supply, including steel service centers and non-defendant producers. (JX-056 at 236:2-241:7; JX-009 ¶ 20 (reporting market shares of defendants only); JX-002 at 29-30; *see also* Tr. III 49:19-25.) Solow expects that supply would differ across products. (Tr. I 143:2-6, 145:11-16.)

4. Unrebutted Evidence Demonstrates that Production of Some Products Within the Class Was Not “Cut.”

54. That not all products would be commonly impacted by the alleged conspiracy is confirmed by the production data analyzed by Hausman, showing that production of structural beams, rebar, and cut-to-length plate—significant class product categories—**increased** throughout the class period. (Tr. III 25:23-28:19; Dkt. # 471-9 at 7; Tr. I 146:21 - 148:17.)²

55. Unrefuted evidence presented at the hearing also showed that SDI’s Butler mill (its only flat-rolled mill) produced more tons in each of the years 2005 through 2007 than it did

² In their closing argument, Plaintiffs claimed for the first time that Hausman’s study of Defendants’ respective structural steel production did not include all of Defendants’ structural mills. Plaintiffs are mistaken. Plaintiffs included in their definition of “structural mills” bar mills where Defendants cannot produce structural beams; Hausman correctly did not include them in his analysis. (*See* DX-002 (listing products by mill).)

in any years in the pre- or post-class periods. (Tr. II 484:20-485:14, 486:22-25; Dkt. # 471-4 at 10.) Similarly, total output of SDI's structural beam mill during each year of the class period was higher than it had been in any prior year since the mill started production. (Tr. II 485:22-486:3; Dkt. # 471-4 at 11; *see also* Tr. II 457:8-458:10, 461:22-463:3 (Pushis testimony about SDI's increased capacity during relevant period at existing mills and through acquisition); Dkt. # 471-9 at 7.)

B. Solow's Structure-Conduct-Performance Analysis Proves Nothing.

56. Solow purported to offer a structure-conduct-performance (SCP) analysis to support his opinions in this case. (Tr. I 78:20-24.) But Solow admitted that the presence of the market factors he studies as part of his SCP analysis—market concentration, lack of substitution possibilities for consumers, barriers to entry—are not common proof of the existence of a cartel or its effectiveness. (JX-010 at 4.)

57. Instead, Solow's SCP analysis shows, at best, that industry conditions are not inconsistent with coordination among firms. (*See* Tr. I 79:14-82:4, 158:20-159:14.)

58. Thus, an SCP analysis does not prove impact at all, much less on each class member. Solow acknowledged on cross examination that his SCP analysis does not prove impact for any steel product on any individual customer. (Tr. I 159:7-14.)

59. Even if it could, Solow did not conduct a proper SCP analysis. According to Solow's treatise, the foundation of SCP analysis is the definition of a relevant market. (JX-176 ¶ 531(a) ("Market definition is the initial step in assessing a market's structure. Structure, in turn, might indicate whether . . . an oligopoly (or cartel) can coordinate prices effectively.")) But Solow performed no economic analysis of relevant markets. Instead, he grouped the entire steel industry into two broad categories of products—flat and long—without conducting any empirical analysis to define relevant product markets. (Tr. III 48:10-50:3.)

60. Given these fundamental flaws in Solow's methodology, the Court finds Solow's SCP analysis unpersuasive.

C. Plaintiffs Did Not Establish That Classwide Impact Can Be Proven Through Supply Side Substitution.

61. Faced with facts confirming that individual steel products and purchasers would not be impacted equally by the conspiracy Plaintiffs allege, Solow opined that the alleged "production cuts" would have "widespread" impact because all flat and all long steel products, respectively, are substitutes on the supply side. (Tr. I 95:12-22; 173:14-20.)

62. Even if established, supply side substitution could not be used to spread the impact of "production cuts" across all products because Plaintiffs have failed to establish in the first place either "production cuts" or a common methodology for proving them at trial.

63. In any event, Solow has failed to establish that the steel products included in Plaintiffs' proposed class definition were supply side substitutes.

1. Relative Profitability of Individual Steel Products Belies Supply Side Substitution.

64. "Relative profitability" of different steel products is essential to Solow's theory of supply side substitution. (Tr. I 163:7-10.) According to Solow, "Producers can divert their production assets from one product to another depending on the relative profitability of the two products." (JX-010 ¶ 24.)

65. Plaintiffs' experts Solow and Wright agree that it is the "economically rational thing" to make more higher-margin products and less lower-margin products in the case of a capacity constraint. (Tr. I 163:17-164:2, 233:1-8; *see also* JX-062 at 185:20-186:4, 188:10-24 (Wright testifying that, in his experience, profit margin plays an important role in whether a steel maker will shift production).) If supply side substitution truly allowed a restriction in supply to raise steel prices across all products, then "margins should be approximately equal across steel

products, and they should . . . converge together.” (Tr. III 34:14-22.) Solow agreed in his deposition that producers of multiple finished products “would want to equalize the marginal revenue per [] ton of steel.” (JX-056 at 245:16-17.)

66. But Solow testified that he did no analysis of the relative profit margins of different steel products in this case. (Tr. I 163:17-164:2.) Plaintiffs have offered no evidence at all about relative profitability. (*See, e.g.*, Tr. I 233:9-11 (Wright testimony that he has no knowledge about profitability of Defendants’ different steel products).)

67. The undisputed record before the Court shows that profit margins for different categories of steel products varied widely throughout the class period and did not equalize. (Tr. III 36:24-40:8; Dkt. # 471-6 at 10-12.)

68. For example, Hausman analyzed the margins of a defendant that produces flat products and found that in 2005, the first year of the proposed class period, profits per ton were \$86 for cold rolled sheet and \$196 for plate. In 2007, the last year of the proposed class period, profits per ton decreased to \$48 for cold rolled sheet but increased to \$294 for plate. (Tr. III 37:11-38:15; Dkt. # 471-6 at 10.) Hausman also examined the margins for a defendant that produces long products and found that they also did not equalize, but instead diverged over time. In 2005, profit per ton for the defendant’s mill making predominantly rebar was \$93, but it was \$135 for a mill making predominantly beam. In 2007, those margins further diverged to \$108 and \$272, respectively. (Tr. III 38:16-39:12; Dkt. # 471-6 at 11.)

69. Publicly available ITC data show similar results. In 2004, gross margins per short ton were approximately \$150 for cut-to-length plate but approximately \$100 for corrosion resistant products. By 2008, those margins diverged to approximately \$225 and \$50, respectively. (Tr. III 39:13-40:8; Dkt. # 471-6 at 12.)

70. Solow also presented no evidence of price elasticity of supply to attempt to show that certain steel products were supply side substitutes. (Tr. III 40:9-17.)

71. Based on the testimony and other evidence in the record, I find that Solow's failure to examine relative profitability among the proposed class products, as well as undisputed evidence of diverging margins, precludes a showing that the steel products in Plaintiffs' proposed class are supply side substitutes.

2. Solow Did Not Establish Actual, Costless or Quick Production Shifts, Which Are Belied by the Record.

72. In his antitrust treatise, Solow describes supply side substitution as follows: "if B producers can **costlessly** switch production to product A **in a short time** and can readily distribute the resulting output, they will constrain the prices of A firms in virtually the same way as another A firm." (Tr. I 165:2-166:7; JX-268 ¶ 561a (emphasis added).)

73. Solow confirmed during his testimony that "[w]ithout a record of actual quick production shifts, you can't be sure that the various impediments to shifting will be overcome" (Tr. I 168:6-18; JX-268 ¶ 561b.)

a. Solow Did No Work To Establish Actual Production Shifts.

74. But Solow testified that he did no statistical work to determine whether any actual shifting occurred at all, let alone whether shifting could be done costlessly and quickly. (See Tr. I 166:12-167:16.) He did not investigate the physical limitations of Defendants' respective mills on shifting among products. (*Id.*) Nor did he talk with anyone who worked at steel mills about how steel is made or interview any industry experts about Defendants' ability to shift among products (or for any other purpose). (Tr. I 175:8-13.)

b. Significant Production Barriers Limited Defendants' Respective Abilities To Shift Production.

75. In fact, the record establishes that the Defendants' respective ability to shift among products was limited.

76. The broad categories of finished steel products referred to as "long" products include structural beam, rebar and merchant bar. (DX-003 at Attach. 1 p.18.) Within each of these broad categories, there are many different products that are not interchangeable from a supply perspective. (DX-003 at Attach. 1 p.18-28.) Two distinct types of steel mills make long products: structural mills and bar mills. (DX-003 at Attach. 1 p.18.) The largest category of long products by revenue, heavy structural beams, is made in structural mills and cannot be made in bar mills. (Tr. II 465:6-21; JX-012 at 14; DX-003 at Attach. 1 pp. 19-20; DX-002; JX-007 ¶¶ 45-48.) Bar mills make steel bar products such as rebar and merchant bar, which cannot be made in structural mills that make medium or heavy structural beam products. (Tr. II 463:24-4; 465:6-21; DX-003 at Attach. 1 p.19-20; DX-002.)

77. Broad categories of finished steel products typically referred to as "flat" products include plate, hot-rolled sheet, cold-rolled sheet and coated sheet. (DX-003 at Attach. 1 p.21.) Within each of these broad categories, there are many different products that are not interchangeable from a supply perspective. (DX-003 at Attach. 1 p.21-28; Tr. II 453:8-454:22.) For example, flat products include both sheet and plate, but those products are made in two distinct types of mills. (Tr. II 454:5-22; PX138 at 3.) Plate steel is made in plate mills and cannot be made in sheet mills. (DX-002; PX138 at 3 (shows plate deriving only from plate mills); JX-007 ¶ 50; JX-008 ¶15.) Sheet steel is made in sheet mills and cannot be made in plate mills. (DX-002; PX138 at 3.)

78. None of the Defendants can produce all of the steel products within the proposed class definition. (DX-002.) Plaintiffs' own industry expert, Wright, acknowledged that Defendants' mills were limited in their ability to switch production by "the capability of the facility." (Tr. 215:10-21; *see also* JX-062 at 191:20-24 ("finishing equipment" limits the range of products that can be made).)

79. Pushis and Roudabush testified about their respective firms' production capabilities and limitations. A Revised Appendix to the Expert Reports of Brian G. Thomas, Ph.D., FASM, and Kent D. Peaslee, Ph.D., P.E., contains a complete listing of the Defendants' respective mills' capabilities and products within the proposed class that are beyond the mills' capabilities. (*See generally* DX-002.) Plaintiffs did not dispute this evidence.

80. For example, none of U.S. Steel, AK Steel or SSAB could make any long products during the class period. (*See* DX-002; Tr. II 544:13-15.) Arcelor Mittal could not make any long products until April 2007 and could not produce structural products at any point during the class period. (*See* DX-002.) Only Nucor could make beams larger than 36 inches during the alleged period. (*See* DX-003 at Attach. 1 p.20; Tr. II 443:4-6; 458:20-25.)

81. Nucor and SDI had no capability during the class period to make low-residual sheet used for exposed automobile body parts, steel used for appliances, or peritectic steel products used for tubing, seamless pipe, welded pipe, and pressure vessels because of the specific melting equipment and technology employed at their respective mills. (DX-003 at 7-10; DX-002; Tr. I 235:1-236:4; Tr. II 469:16-17; JX-062 at 172:4-20.) All of these products were sold in commercially significant amounts during the alleged class period. (JX-012 at 13; Tr. I 242:23-243:15; JX-062 at 164:22-166:10, 173:7-20.) SDI also could not make any plate or IF steels (ultra-low carbon, low residual steels) during the relevant period. (Tr. II 453:6-455:20.)

U.S. Steel could not make any grain oriented steels or high strength hot rolled steel. (Tr. II 539:21-540:5; DX-001 ¶50; DX-002.)

82. Only one of the Defendants could produce the SA-455 steel plates used by proposed class representative Alco Industries, Inc. in making the outer diameter of pressure vessels (JX-312 at 120:9-24, 122:18-21) and the steel plate required by proposed class representative Wilmington Steel in making military vehicles (JX-324 at 173:21-174:2).

83. Production capabilities are also limited even within the respective facilities operated by each Defendant. Because the finishing facilities differ across Defendants' various plants, not all steel products can be made in all of Defendants' respective plants. (Tr. I 256:13-22; Tr. II 545:22-546:18; DX-001 ¶¶ 31-32, 36-37, 45.) For example, Roudabush testified that some exposed automotive and high strength steels made by U.S. Steel could be made only at certain of its plants. (Tr. II 532:23-533:9.) And some of the largest customers within the proposed class required that their steel producers be specially certified, dictating the plant, equipment or production method that could be used to produce their product. (See Tr. I 247:19-249:19.)

84. The undisputed factual record further establishes that any possible shifting was neither costless nor quick. Pushis testified that it took years for SDI to develop class 1 rail—a product its Columbia City mill was designed to make—after demand for beams dried up in the Great Recession. (Tr. II 457:22-459:7, 496:23-497:2, 497:12-25.) Pushis also testified that for SDI to shift production to plate—a product it is not capable of making—would require a new facility that would take about two years and cost more than \$250 million to build. (Tr. II 454:7-24.) Pushis testified that this would be true even assuming SDI had the excess furnace capacity at the time, which it did not. (*See id.*) Similarly, Pushis testified that to begin producing a new

long product such as merchant bar, a firm would have to build (or acquire, as SDI did) a new mill. (Tr. II 461:22-462:17.)

c. Long-Term Contracts Limited Defendants' Respective Abilities To Shift Production.

85. A significant portion of sales for some Defendants in the proposed class period was pursuant to long-term contracts, which provide for a fixed price of the steel purchased over the term of the contract. (JX-009 ¶ 58; JX-062 at 105:18-107:12; DX-001 ¶¶ 69, 71.)

86. In the ITC proceeding on which Solow relies for his supply side substitution theory, Hausman opined that cross-price effects from supply side substitution in the steel industry were diminished: “because of contractual restrictions, it take[s] some time to change, and there are also adjustment costs.” (JX-019 at 491.) Hausman confirmed his opinion in this case. (Tr. III 42:7-44:1.) ITC Commissioner Jennifer Hillman similarly observed in the same ITC hearing that a large portion of flat products are sold on a long-term contract basis, so the mills “obviously . . . are not going to be able to shift that demand immediately from one product category to another whenever the profit margin changes.” (JX-019 at 490.)

87. Wright testified that contractual constraints impede the ability of a producer to produce high-margin products instead of low-margin ones. (JX-062 at 188:10-24.) Solow also accepted that long-term contracts “could” impede switching. (Tr. I 168:19-25; JX-268 ¶¶ 538a, 561b.)

88. Based on the testimony and other evidence in the record, I find that Plaintiffs have not proved either actual production shifts by Defendants or Defendants' abilities to shift production costlessly or quickly, both of which are required for Solow's supply side substitution theory to spread the effects of any alleged conspiracy.

3. Defendants' Statements and ITC Testimony Do Not Support Supply Side Substitution.

89. Solow relied on high-level statements by Defendants' executives that shifting among products is possible. (Tr. I 164:9-12.) But his own treatise admonishes that "subjective testimony" by "company officials" about their possible supply responses to changing industry conditions is less reliable than "objective data" showing "[p]ast shifts by [] producers" or production cost data that can indicate "whether [] suppliers will shift." (JX-268 ¶ 538a-b.)

90. And Solow admitted that he cannot tell from any of these statements if alleged production cuts caused the production level of any individual product to be different than it otherwise would have been. (Tr. I 173:21-174:1.)

91. Solow also relied on statements made in 2001 in Section 201 proceedings before the ITC. The issue before the ITC in 2001 was whether certain steel products were being imported in high enough amounts to threaten the domestic industry as a whole. (Tr. I 178:9-13.) The proceedings were not about the effects on individual customers of steel products, and the ITC nowhere mentioned effects on individual customers of steel products. (Tr. I 178:14-19.) Solow made no attempt to update Hausman's ITC work—looking backward from 2001—to cover the alleged period in this case. (Tr. I 182:4-8.) As a result, some of the evidence Solow relied on here does not reflect the facts during the alleged class period. (*Compare* Tr. III 135:8-139:17 (questioning about Nucor CEO Dan DiMicco's testimony in 2001 that a single long products mill could make all long products, including beam) *with* Structural Steel Beams from Japan and Korea, Inv. Nos. 701-TA-401, 731-TA-853-854, USITC Pub. 3840, I-22n.4 (Mar. 2006) (Review) available at: www.usitc.gov/publications/701_731/pub3840.pdf (stating that the single bar mill in which Nucor made beam products in 2001 no longer did so after 2003).) Based

on these distinctions, the Court finds Solow's reliance on ITC proceedings from 2001 to be of little value.

92. Solow also ignored the outcome of the ITC proceedings. Neither Hausman nor the ITC found any evidence of supply side substitution among long products in these proceedings. (Tr. I 183:10-12 (Solow testimony that "[t]he ITC determined that there wasn't supply-side substitution [for long products]"); Tr. III 43:15-21; Dkt. # 471-6 at 14.)

93. During the ITC proceedings, Hausman undertook a statistical study of 1995-2000 data looking for cross-product price effects on long products and found no such evidence. (Tr. III 48:19-49:1; JX-027 at 81-82.) Citing Hausman and the testimony of long product customers, the ITC found that "[b]ecause of their distinct uses and the lack of any cross-product price effects, . . . hot-rolled bar, rebar, and heavy structural shapes do not have sufficiently common characteristics to warrant grouping them for purposes of our injury analysis, notwithstanding the overlap in facilities producing these products." (JX-027 at 82.)

94. Hausman found only very weak evidence of supply side substitution among flat steel products in the ITC proceeding and found that the products were not in the same economic market. Such low levels of supply side substitution are not sufficient to infer that the alleged production cuts would impact all class members who purchased flat products. (Tr. III 21:24-22:16, 42:7-44:1.) For example, Hausman found in the ITC proceeding that if the average price of cold rolled steel changed 10% then the change in the average price of galvanized steel was only 0.9%. (Tr. III 42:18-20.) Further, any supply side effect was in the medium to long term with significant lag. (Tr. III 43:2-4; Dkt. # 471-6 at 14.) These findings do not support the extensive and immediate supply side substitution of products required to support Solow's theory of classwide impact.

95. The undisputed record shows that profit margins did not equalize or converge as required for the widespread supply side substitution Solow asserts occurred. Nor has Solow established actual production shifts by Defendants—let alone Defendants’ abilities to shift production costlessly and quickly. Accordingly, I find that Solow’s supply side substitution theory is unsupported.

V. MCCLAVE’S MODEL DOES NOT PROVIDE COMMON PROOF OF IMPACT OR DAMAGES.

96. Though, according to Solow, it was “Dr. McClave’s job” to determine the but-for world (Tr. I 151:11-13), McClave admittedly did not do any analysis to determine the but-for level of production or price. By his own admission, McClave’s model cannot be used to determine the amount of overcharge, or whether there was any overcharge at all, for any individual customer. And his model’s fundamental flaws independently prevent Plaintiffs from using it to establish either impact or damages classwide.

A. McClave Admits That His Model Does Not Establish Either Impact or Damages for Any Individual Plaintiff.

97. McClave admitted that his model does not predict the but-for price and, therefore, the amount of overcharge for any individual customer—“not in what I [McClave] would call a reliable way.” (Tr. II 382:16-383:1, 417:7-10.)

Q: And your original model doesn’t predict the but-for price for any individual customer, correct?

A: That’s right.

Q: And it, therefore, couldn’t tell us whether an individual customer was overcharged, correct?

A: If you ask can that model be used to calculate a particular customer’s overcharge, my answer would be no.

(Tr. II 382:16-22.)

98. Without a reliable but-for price, McClave’s model cannot be used to show whether any individual customer was overcharged at all, or by how much. Accordingly, the

Court finds that McClave's model cannot be used to show either impact or damages for any particular customer, let alone classwide.

B. McClave's Model Contains Multiple, Fundamental Econometric Flaws That Render It Incapable of Proving Impact or Damages for Each Class Member.

1. Overview of McClave's Models

99. In his original report, McClave used a "dummy variable" model, which seeks to explain the price of steel products (the dependent variable) by controlling for relevant demand and cost factors (the explanatory variables). (JX-005 at 6.) McClave's model used a pre-"conspiracy" benchmark period (February 2002 to March 2005), a post-"conspiracy" benchmark period (January 2008 to December 2009), and the proposed class period (April 2005 to December 2007). (Tr. III 64:10-20; JX-003 ¶ 3.)

100. McClave runs one regression for all flat products and one regression for all long products. (JX-005 at 5.) These regressions lump the hundreds of disparate steel products into 25 broad categories (18 flat, 7 long). (Tr. I 366:6-9; Tr. III 54:16-55:3; Dkt. # 471-6 at 19.)

101. McClave used a single dummy variable. He included just one explanatory demand variable (a weighted average index of demand for construction and automobile manufacturing) and just one explanatory cost variable (scrap costs) in his model. (JX-005 at 8.) The dummy variable picks up all other factors that are different in the proposed class period relative to the pre-and post-class periods, and McClave attributes the impact of those factors to the alleged conspiracy. (JX-005 at 6.) If demand, costs and other factors that could affect price are not sufficiently controlled for, the dummy variable will falsely attribute the effects of any omitted factors to the alleged conspiracy. (Tr. III 18:5-9.)

102. In response to Hausman's criticisms, discussed below, McClave presented two new models in his rebuttal report: a so-called customer-specific model and a forecasting model.

These models use the same data as McClave's original model, the same aggregation of products into 25 categories, and the same explanatory variables for demand and cost. (Tr. II 385:8-386:16; JX-006 at 6-7, 46.)

103. In his customer-specific model, McClave "added customer identifiers." (JX-006 at 6.) But McClave continued to use a single dummy variable to measure the impact from the alleged conspiracy. (*Id.* at 7.)

104. In his forecasting model, McClave ran a regression using data from the combined pre-conspiracy and post-conspiracy benchmark periods to generate estimates of the relationship between prices and his demand and cost variables, and he applied those estimates to data from the proposed class period to "forecast" prices during the proposed class period. (JX-006 at 46.) Although the forecasting model does not use a dummy variable, like McClave's original dummy variable model, it generates a single average estimate of impact for all long and flat customers.

105. McClave did not offer his customer-specific model in support of class certification; rather, he included it in his rebuttal report in response to Hausman's criticism that McClave's analysis cannot prove classwide impact. (JX-006 at 6; JX-002 at 54.) The customer-specific model is offered in an attempt to validate the robustness of his original model—not as a method of proving impact on every class member. (Tr. II 318:12-13.) For impact and damages, McClave relies only on his original model, which he admits cannot be used to determine in a meaningful or reliable way whether any individual customer was overcharged. (Tr. II 382:16-383:1.)

2. McClave's Benchmark Periods Are Not Comparable to the Proposed Class Period.

106. As McClave explained in the *Urethane* case, to use a dummy variable model, an econometrician must look at whether the relationship between price and the relevant variables remains similar across the entire time period:

Q: Is it correct, Dr. McClave, that in order to appropriately use a dummy variable model, the econometrician looks to see whether there's a similar relationship between price and the important variables . . . across the whole period?

A: That's – that's right.

(DX-094 at 2888:21-2889:1.) If the relationship does not remain consistent over time, then the regression will generate biased and unreliable estimates of the relationship between the dependent variable (here, price) and the control variables (here, demand and cost). For example, if in one period a 1% increase in cost leads to a 10% increase in price, and in another period a 1% increase in cost leads to a 0.1% increase in price, then combining those periods would lead to an estimate of the relationship between price and cost somewhere in the middle that would not reflect the true relationship between price and cost in any of the periods.

107. Here, the relationships between price and McClave's demand and cost variables are statistically different between (1) each of the benchmark periods and the class period, and (2) the two benchmark periods. McClave ignored his own rule.

108. To test whether the relationship between the period was similar and whether McClave's combining them in his model was appropriate, Hausman ran a standard econometric test called a Chow test. Solow acknowledged that the Chow test is a "test of whether there are structural changes" between periods. (Tr. I 154:7-8; 393:12-394:3.) McClave also admitted that he has used the Chow test in other cases. (Tr. I 395:10-12.)

109. The results of the Chow test here confirm that the relationship between price and McClave's cost and demand variables does not remain constant across any of the three periods used in McClave's model. Hausman testified that McClave's model flunked the Chow test with 99.9% certainty. (Tr. III 71:9-14.) Instead, the data show "structural breaks." (*See* Tr. III 64:10-20; Dkt. # 471-3 at 24.) Thus, McClave's use of a dummy variable model that treated the relationships between price and cost and price and demand as constant through the study period was admittedly improper. (Tr. III 68:22-69:23; Dkt. # 471-6 at 23.)

110. Hausman first opined in his initial report in February 2013 that McClave's model failed the Chow test. Since then, McClave has not come up with any evidence that he performed the Chow test, or that his model passed the Chow test. (Tr. II 394:4-24.)

111. In response to these criticisms, McClave in his reply report instead used a forecasting model. But the McClave's forecasting model does not solve the problem, because it too fails the Chow test. And McClave admitted that the post-class period encompassing the Great Recession was "very different." (Tr. II 305:19.) Thus, as Hausman explained, combining the pre-period and post-period in a single benchmark for use in a forecasting model also was improper. (Tr. III 76:22-77:4; Dkt. # 471-6 at 25.)

3. McClave's Treatment of the Great Recession Was Designed To Achieve a Pre-Determined Result.

112. One likely reason why the post-conspiracy period shows a structural break from the pre-period is that his post-conspiracy benchmark period includes the Great Recession. (Tr. I 133:13-14 (Solow testifying about the severity of the Great Recession).) McClave testified that his staff may have tested the Plaintiffs' original class period ending in mid-2008 and sent analyses to Plaintiffs' lawyers, but he claimed he did not know why they decided to shorten it,

allowing him to move the Great Recession out of the class period and into the benchmark period. (Tr. II 389:17-391:23.)

113. During the Great Recession, the U.S. unemployment rate rose to over 10%, industrial output plummeted, the stock market dropped substantially, and companies like General Motors and Chrysler declared bankruptcy, among other things. (Tr. III 65:3-6, 66:25-67:19; Dkt. # 471-6 at 22.) As Hausman explained, “to think that [the Great Recession’s] going to be ‘normal competitive conditions’ that you could use as an antitrust benchmark, to me, doesn’t make economic sense.” (Tr. III 65:7-10.)

114. McClave nevertheless included the Great Recession in all of his models. Doing so was necessary to generate the results Plaintiffs wanted. By using both the pre-class and post-class periods as the benchmark, McClave’s forecasting model results in an average impact of 6.88% for long products and 5.37% for flat products. But excluding the Great Recession, using only the pre-class period as the benchmark in the forecasting model, generates an average impact of **negative** 7.2% for long products and **negative** 21.3% for flat products, indicting no impact. (Tr. III 77:18-79:21; Dkt #471-6 at 26-28). These wildly different results demonstrate that McClave’s model is not reliable and that including the Great Recession in the benchmark period is inappropriate.

115. In an attempt to address this improper reliance on the Great Recession as a competitive benchmark period, McClave testified that he performed a forecasting analysis in which he removed the Great Recession. (Tr. II 357:3-23.) In fact, McClave removed data starting only in September 2008—not in December 2007, when the National Bureau of Economic Research, relied upon by the United States Department of Commerce, stated that the Great Recession began. (See Tr. III 66:3-11; 67:4-7; Dkt # 471-8 at 6.)

116. But even that did not work: Hausman ran a Chow test on this new analysis, and found that McClave's new analysis also failed. The probability again was essentially zero that the pre-period and McClave's truncated post-period from January 2008 to September 2008 were economically similar. (Tr. III 72:7-16.)

4. McClave's Model Generates a Single, Average Estimate of Impact, and Thus Cannot Show Impact or Damages for Each Class Member.

117. McClave's use of a single dummy variable also means that McClave calculates a single, average overcharge for all customers. (Tr. III 60:12-62:2.) This single dummy variable does not vary over time, products, or customers. (Tr. II 381:7-25.) Because the single dummy variable is the same for all customers, McClave's model effectively assumes, rather than offers a methodology that can be used to establish, common impact and damages.

118. Even in his customer-specific model, McClave uses a single dummy variable to assess impact; and in his forecasting model, he calculates a single average estimate of impact. These models therefore also do not show common impact or damages.

119. Hausman, by contrast, applied McClave's customer-level approach but added a separate dummy variable for each customer to test whether each customer was impacted by the alleged conspiracy. Making just this change, Hausman found that the number of customers not impacted under McClave's model increased substantially. (Tr. III 61:6-62:2.) For example, looking at just seven large automobile manufacturers (some of the largest would-be class members), Hausman found that McClave's measure of "impact" changed substantially. GM, for instance, went from a positive "impact" of 2.3% under McClave's approach to negative 0.9% when Hausman added a separate class variable for GM. Other automobile manufacturers showed similar results "with five of the seven showing no impact." (Tr. III 62:21-64:9; Dkt. #

471-6 at 21.) These results confirm that McClave's models cannot show whether each customer was impacted and therefore cannot support class certification.

5. McClave's Model Averaged Widely Varying Steel End Product Prices.

120. McClave did not examine whether the hundreds of steel products he grouped together into broad categories of 18 flat and 7 long products were sold to the same or similar customers, whether they had the same chemical composition or properties, or whether they were demand substitutes for one another. (Tr. II 369:2-22.)

121. McClave's use of highly aggregated and averaged data disguised significant differences in actual prices. In his original model, McClave started with 29,028,346 individual transactions and then averaged those transactions into 6,742 observations (4,859 flat, 1883 long). (Tr. II 315:4-7, 372:12-22; JX-002 at 53, 67.) The 6,742 observations that McClave uses in his model represent only 0.023% of the 29,028,346 transactions with which McClave started. (Tr. III 54:7-55:3; Dkt. # 471-6 at 19.)

122. Prices varied significantly within the broad product categories McClave used and among the different purchasers that McClave grouped together. (JX-002 at 13-15; Tr. III 59:20-25.) For example, for his prime galvanized product category for October 2006 for the defendant U.S. Steel, McClave averaged over 18,000 transactions into a single data point. Those transactions included products sold to diverse customers with prices ranging from \$304 to \$1,600, yet McClave averaged them into a single price of \$794.54. (Tr. II 372:12-374:20.)

123. McClave's averaging methodology masked this price variation and ignored the differences in customer buying power and the different demand conditions faced by different customers. (Tr. III 59:11-60:2.) It also masked that some customers, including several large

automobile manufacturers, paid below McClave's predicted but-for prices. (Tr. III 59:20-60:2; JX-002 at 15-20, 60-62; *see also* Dkt. # 471-6 at 21.)

124. As Hausman showed, McClave's claim that this aggregation and averaging is appropriate because his model "held up very well" when tested against his customer-level analysis is meaningless. (Tr. II 318:7-319:8.) McClave's customer-level approach still uses a single dummy variable to calculate the impact of the alleged conspiracy, and thus generates only an average measure of impact.

125. McClave's model, including the customer-specific version of his model, calculates a single, average overcharge not only across all customers but also over the entire 33-month class period. (Tr. III 60:12-62:2; Tr. II 381:7-25.) Yet Plaintiffs do not even allege production "cuts" for most of that period.

6. McClave Failed To Account for Highly Relevant Cost and Demand Factors, Falsely Attributing Price Effects to the Alleged Conspiracy.

126. McClave did not attempt to measure production cuts directly, claiming that would "taint" the model. (Tr. II 303:23-304:5.) But Hausman explained that a standard econometric technique that has been around for over 50 years, called a "two-stage least squares" approach, solves McClave's concern. (Tr. III 31:4-11, 58:22-59:10.) This framework was invented during World War II; its inventor won a Nobel Prize for it. (Tr. III 31:6-9.) McClave could have used this technique to model the relationship between production and independent variables that were not "tainted" by the alleged conspiracy. He could then have used the results of that model of production in his model of price, avoiding any potential "taint" from the alleged conspiracy. (Tr. III 58:22-59:10.) The Court finds McClave's assertion that including production in his analysis would "taint" his model to be unpersuasive.

127. Instead, McClave's dummy variable model purports to measure the effect of production cuts indirectly in that "[t]he dummy variable captures any systematic difference between prices in the competitive benchmark period and the damages period which is not explained by the other variables in the model and is thus attributable to collusion." (JX-005 at 6; Tr. II 302:22-303:2.) McClave's explanatory variables are therefore critical to his model, which falsely attribute to the alleged conspiracy any unaccounted-for noncollusive factors causing price variation, such as changes in cost or demand.

128. McClave does not account for the spike in Chinese demand in 2004-2005, which caused an increase in the cost of inputs used in making steel products, and likely was an important cause of these skyrocketing costs. (Tr. III 91:23-93:10.) As the Chinese steel industry continued to grow, it drove up demand for the raw materials needed to make steel, and the prices of those raw materials increased as a result. (Tr. III 12:2-11.) Hausman testified that Chinese steel production was only 15% of the global total in 2000, but just four years later in 2004 it accounted for 25% of the global total, and by 2009 it was more than double what it was in 2004. (Tr. III 91:17-92:22; Dkt # 471-6 at 36.) As Hausman explained, "every 2 years the Chinese were investing so much new production that it was like they were replicating the U.S. steel industry." (Tr. III 92:6-11; Dkt. # 471-6 at 29-30.)

129. Zinc is one of the inputs with spiking costs during the class period. But McClave ignored zinc, even though it is a significant component of galvanized steel products, which make up almost one-quarter of overall class sales (Tr. II 404:1-12, 559:18-561:10 (Roudabush testimony that zinc can impact total cost of galvanized steel more than scrap would).) Specifically, zinc rose from a low in August 2002 during the pre-class period of \$747.60 per

metric ton to a high of \$4396.63 in December 2006 in the middle of the class period, a 488% increase. (Dkt. # 471-3 at 14, 16, 24; Dkt. # 471-6 at 29; Dkt. # 471-3 at 24.)

130. McClave agrees that the tripling of a component cost is “not insignificant” (Tr. II 407:20-24), and admits that the prices of galvanized products could have increased during the class period more than they otherwise would have because of the spike in the cost of zinc (Tr. II 405:21-24).

131. McClave claims that his failure to account for zinc is not problematic because zinc fluctuations affect only certain product groups, and once averaged and blended together with other product groups, zinc has no statistical effect. (Tr. III 194:6-12, 197:18-198:11.) But this claim defeats class certification. If true, McClave’s claim confirms that damages can be determined only on a product-by-product basis.

132. McClave also theorized that zinc costs could be captured by scrap costs. But Hausman examined the correlation between scrap cost and zinc and found that it was “low during the class period” and not captured by scrap costs. (Tr. III 64:4-6; Tr. III 84:1-85:10; Dkt. # 471-6 at 32.) On cross-examination, McClave admitted that the correlation between zinc and scrap was only .47 in the class period, as opposed to .92 in the pre-class period. (Tr. III 196:3-11; Dkt. # 471-6 at 32.)

133. McClave also did not control for any demand variables other than through an index of demand for automobiles and non-residential construction. For example, McClave did not control for demand for appliances or for oil and gas applications, both of which are other major sources of steel demand. (Tr. III 85:11-86:3, 88:21-89:20; Dkt. # 471-6 at 35.)

134. The Court finds that McClave's exclusion of these cost and demand variables results in significant bias in his models' estimates of impact and falsely attributes price effects to the alleged conspiracy, as Hausman has shown.

7. McClave's Model Fails Standard Econometric Tests.

135. In addition to failing the Chow Test, McClave's model fails the F-test and the Hausman test, which further demonstrates its unreliability and bias.

136. An F-test is a well-established statistical test for whether adding additional variables to a model increases the model's fit with the data by a statistically significant amount. Hausman testified that McClave's model failed the F-test with a high degree of statistical significance, which confirms that McClave did not adequately control for cost and demand variables. (Tr. III 86:20-87:15, 88:24-90:2.) McClave's failure to include additional variables biases any estimates of alleged impact it could calculate. (Tr. III 94:4-13.)

137. The Hausman test, created over 30 years ago, is a well-accepted and often relied-on econometric test for whether a regression model's error term is correlated with the included explanatory variables and therefore mis-specified and biased. (Tr. III 107:17-108:5; JX-002 at 69.) Solow testified that he himself has used the Hausman test. (Tr. I 154:11-12.) Hausman testified that McClave's regression model (which seeks to explain price by controlling for the single demand and cost variables) failed the Hausman test for both flat and long products when it was compared to a first differences regression model (which seeks to explain the change in price by controlling for the change in the single demand and cost variables), confirming that McClave's model is mis-specified. (Tr. III 109:2-24; Dkt. # 471-6 at 45.)

138. That McClave's model fails the Chow Test, the F-test and the Hausman Test illustrates that it cannot be used either as common proof of impact or a common method for calculating damages, because its results are unreliable and biased.

8. The Insufficiency of McClave's Model Is Confirmed by False Positives.

139. The many flaws in McClave's approach are confirmed by the substantial false positive results generated by his models. A model that generates substantial false positives—finding impact and damages where the alleged conspiracy could not possibly have had any effect—calls into question the reliability of the model's finding of impact and damages during the alleged conspiracy period, as Hausman explained. (Tr. III 100:6-11.)

140. First, McClave's model predicts overcharges of more than \$2.5 billion in false positive damages in the pre-conspiracy period, where but-for and actual prices should align if McClave's model were accurate. In the second half of 2004, Hausman demonstrated that McClave's model found \$999 million in false positive damages for flat products and \$304 million in false positive damages for long products. This amounts to over \$1.3 billion in false positive damages for just the second half of 2004 in McClave's model. (Tr. III 99:24-100:5; Dkt. # 471-6 at 38-39.) McClave's model also showed significant false positives in 2002 where but-for prices were again below actual prices for extended period of time. (Tr. III 98:23-99:10; Dkt. # 471-3 at 22-24.)

141. McClave offered two responses to these false positives. He first claimed that the false positives were just "random noise." (Tr. II 427:24-428:17.) But as Hausman testified, if they were random noise, McClave's prediction of but-for price would be "bouncing up and down" in relation to the actual price; in fact, McClave's models show but-for prices below actual prices for extended periods in the pre-conspiracy period. (Tr. III 98:23-99:23.) In addition, Hausman's analysis showed that the percentage "overcharge" during the periods of false positives is greater than the percentage overcharge that McClave's models calculate during the

class period. (Tr. III 100:8-11.) False positives that were just “random noise” would not have been statistically significant at the 99.99% level, as Hausman showed. (Tr. III 98:6-19.)

142. McClave also suggested that the transactions at actual prices above his but-for line in the benchmark periods would “basically cancel” the transactions at actual prices below the but-for line. (Tr. II 428:8-17.) But averaging false positives and false negatives misses the point: in bowling, putting the first ball in the gutter on the left and the second ball in the gutter on the right does not result in a perfect score—it results in a zero. The key is that McClave’s model is not accurate. (Tr. III 99:12-100:11.)

143. Second, McClave’s model predicts substantial overcharges for customers who purchased steel products during the class period under contracts negotiated in the pre-conspiracy period. (Tr. III 100:25-102:25; Dkt. # 471-6 at 41-43.) Plaintiffs concede that these purchases could not have been impacted by the alleged conspiracy. (Tr. II 421:2-422:22.) Yet for many of these customers, McClave’s model predicts that their but-for prices would be below the actual contract price and thus incorrectly finds that these customers were impacted by the conspiracy even though they were buying steel at prices negotiated prior to the alleged conspiracy.

144. Hausman testified about and submitted through his rebuttal report several specific examples. Bradford White, a manufacturer of water heaters, signed a contract locking in its pricing before the alleged conspiracy. (Tr. III 101:1-10.) But McClave’s customer level model nonetheless predicted a but-for price below the actual minimum contract price. The same was true for Hayes Lemmerz. (Tr. III 102:11-19; Dkt. # 471-6 at 41-43; Dkt. # 471-9 at 21; JX-003 ¶¶ 43-48.)

145. Plaintiffs also offered no method for customers to determine whether their purchases during the class period under preexisting contracts are excluded from the class or

instead included by Plaintiffs' ill-defined "transactions for which a sales contract was negotiated before the class period but (i) delivery was received during the class period and (ii) the actual transaction price under the contract was adjusted (or indexed) based on market pricing that prevailed during the class period." (PX136 at 7.)

146. The Court finds that these false positive results—which demonstrate that McClave's model reflects overcharges where none could exist—confirm that McClave's model cannot reliably predict the alleged overcharge for any particular customer's purchases made during the class period.

CONCLUSIONS OF LAW

I. TO SATISFY THEIR BURDEN UNDER RULE 23, PLAINTIFFS MUST DEMONSTRATE THAT COMMON EVIDENCE CAN BE USED TO PROVE IMPACT AND DAMAGES FOR EACH MEMBER OF THE PROPOSED CLASS USING A METHODOLOGY THAT "FITS" THEIR LIABILITY THEORY.

147. *Comcast* reaffirmed the Supreme Court's pronouncement in *Dukes*, 131 S. Ct. at 2551, that "Rule 23 does not set forth a mere pleading standard." Instead, Rule 23 requires that Plaintiffs "satisfy [their burden] through evidentiary proof" subject to a "rigorous analysis" by the Court, even if the analysis entails overlap with the merits. *Comcast*, 133 S. Ct. at 1432. *See also Parko*, 739 F.3d at 1086 (courts considering class certification must "investigate[] the realism of . . . plaintiffs' injury and damage model in light of defendants' counterarguments"); *In re Rail Freight Fuel Surcharge Antitrust Litig.*, 725 F.3d 244, 255 (D.C. Cir. 2013) ("It is now clear . . . that Rule 23 not only authorizes a hard look at the soundness of statistical models that purport to show predominance—the rule commands it.").

148. The predominance inquiry under Rule 23(b)(3) "begins . . . with the elements of the underlying cause of action." *Erica P. John Fund, Inc. v. Halliburton Co.*, 131 S. Ct. 2179, 2184 (2011). Plaintiffs allege a cause of action arising under § 4 of the Clayton Act, 15 U.S.C.

§ 15, the essential elements of which are “(1) a violation of antitrust law . . . ; (2) individual injury, or impact, caused by that violation; and (3) measurable damages.” *Reed v. Advocate Health Care*, 268 F.R.D. 573, 581 (N.D. Ill. 2009) (citing *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d 305, 311 (3d Cir. 2008)). “If proof of the essential elements of the cause of action requires individual treatment, then class certification is unsuitable.” *Id.*

149. To establish predominance, Plaintiffs must demonstrate that common evidence exists to prove at trial that each class member was impacted by the alleged conspiracy. *See Comcast*, 133 S. Ct. at 1430 (requiring plaintiffs to “show . . . that the existence of individual injury resulting from the alleged antitrust violation . . . was capable of proof at trial through evidence that was common to the class rather than individual to its members”) (internal quotation marks and alteration omitted).

150. *Comcast* also requires Plaintiffs to establish that a common methodology exists for measuring each class member’s damages. *Id.* at 1431, n.4, 1434 (holding that a party seeking class certification must “show that the case is susceptible to awarding damages on a classwide basis”); *accord Parko*, 739 F.3d at 1086 (requiring a reliable classwide model “to prove both injury and damages”); *Rail Freight*, 725 F.3d at 252-53 (“[c]ommon questions of fact cannot predominate where there exists no reliable means of proving classwide injury in fact.”)

151. Finally, Plaintiffs must offer a methodology for proving impact and damages that “fits” their theory of liability and “measure[s] only those damages attributable to that theory.” *Comcast*, 133 S. Ct. at 1433; *see also Parko*, 739 F.3d at 1087 (reversing certification where plaintiffs presented “no . . . credible evidence[] of a connection between” the alleged misconduct and class members’ injury). In other words, Plaintiffs must present a model that “measure[s]

damages resulting from the particular antitrust injury on which [defendants'] liability in this action is premised.” *Comcast*, 133 S. Ct. at 1433.

152. Plaintiffs argue that *Comcast* is limited to its facts and that Seventh Circuit decisions in *Butler v. Sears, Roebuck & Co.*, 727 F.3d 796 (7th Cir. 2013) (*Butler II*), and *Messner v. Northshore Univ. HealthSystem*, 669 F.3d 802 (7th Cir. 2012), somehow allow Plaintiffs to evade the Supreme Court’s reach. But Plaintiffs’ cramped reading of *Comcast* and expansion of *Butler II* and *Messner* are belied by the Seventh Circuit’s more recent decision in *Parko* and the D.C. Circuit’s decision in *Rail Freight*.³

153. The Supreme Court in *Comcast* reversed class certification because plaintiffs could not prove damages with common, classwide proof. *Comcast*, 133 S. Ct. at 1431 n.4. The Court rejected the notion that “at the class certification stage *any* method of measurement is acceptable so long as it can be applied classwide,” instead requiring antitrust plaintiffs to “tie each theory of antitrust impact to a calculation of damages.” *Id.* at 1433 (internal quotation marks omitted).

154. Following *Comcast*, the D.C. Circuit in *Rail Freight* held that “[t]he plaintiffs must also show that they can prove, through common evidence, that all class members were in fact injured by the alleged conspiracy.” 725 F.3d at 252. “No damages model, no predominance, no class certification.” *Id.* at 253. The Seventh Circuit followed suit with Judge Posner’s opinion in *Parko*:

The district judge . . . thought it enough at this stage that the plaintiffs intend to rely on common evidence and a single methodology to prove both injury and damages But if intentions (hopes, in other words) were enough,

³ The Central District of Illinois has also rejected Plaintiffs’ interpretation of *Comcast*. See *In re IKO Roofing Shingle Prods. Liab. Litig.*, No. 09-MD-2104, slip op. at 7 (C.D. Ill. Jan. 28, 2014), *appeal pending*, No. 14-1532.

predominance, as a check on casting lawsuits in the class action mold, would be out the window.

739 F.3d at 1086.

155. The Seventh Circuit's decision in *Parko* forecloses Plaintiffs' reading of *Butler II* and *Messner*. The lower court in *Parko* granted plaintiffs' motion for class certification without first conducting a rigorous analysis to determine whether plaintiffs could "rely on common evidence and a single methodology to prove both injury and damages." *Parko*, 739 F.3d at 1086. The Seventh Circuit reversed in an opinion that focused on plaintiffs' failure to show a sufficiently precise fit between their theory of liability and their methodology for proving impact and damages on a classwide basis. *Id.* At 1086-87. After *Parko*, Seventh Circuit precedent is clear that both impact and damages must be susceptible to common proof to satisfy Rule 23(b)(3). Plaintiffs' repeated assertions to the contrary are simply wrong.

156. Further, despite Plaintiffs' arguments otherwise, *Butler II* and *Messner* are consistent with *Comcast*. In *Butler II*, unlike in *Comcast* and here, "the district court . . . neither was asked to decide nor did decide whether to determine damages on a class-wide basis." 727 F.3d at 800. Plaintiffs here contend that both impact and damages can be proved on a classwide basis. (Tr. I 10:14-15, 16:8-9; 71:4-8.)

157. In *Messner*, the district court erred because it held that Rule 23(b)(3) required **common results** from the damages model for each class member. *Butler II*, 727 F.3d at 801 (noting that the *Messner* court rejected an interpretation of Rule 23(b)(3) that "would require not only common evidence and methodology, but also common results for members of the class"); *see also Messner*, 669 F.3d at 819. Plaintiffs cite *Messner* for the proposition that they need not demonstrate for class certification that every class member suffered identical damages. (JX-194

at 52.) But Defendants do not argue that damages must be identical for each class member—just the methodology. Plaintiffs thus cite *Messner* to knock down a straw man.

158. To the extent Plaintiffs continue to rely on *Manpower, Inc. v. Ins. Co. of Pa.*, 732 F.3d 796 (7th Cir. 2013), and *In re High Fructose Corn Syrup Antitrust Litig.*, 295 F.3d 651 (7th Cir. 2002), that reliance is improper. Neither was a class certification decision, and *High Fructose* predates *Comcast* by over a decade. Plaintiffs’ reliance on pre-*Comcast* case law to support their interpretation of Rule 23’s requirements is improper. “Before *Behrend*, the case law was far more accommodating to class certification under Rule 23(b)(3).” *Rail Freight*, 725 F.3d at 255.

159. Plaintiffs’ impact and damages model must be capable of reliably predicting overcharges for each class member “through evidence that [is] common to the class rather than individual to its members.” *See Comcast*, 133 S. Ct. 1433, 1430, 1435 n.6 (internal quotation marks omitted) (“[E]ven if [McClave’s aggregate damages] model had identified [class members] who paid more solely because of the [effect of the alleged misconduct], it still would not have established the requisite commonality of damages unless it plausibly showed that the extent of [the effect] would have been the same in all counties, or that the extent is irrelevant to effect upon ability to charge supracompetitive prices.”); *Parko*, 739 F.3d at 1086; *Rail Freight*, 725 F.3d at 252; *see also In re Plastics Additives Antitrust Litig.*, No. 03-cv-2038, 2010 WL 3431837, at *16 (E.D. Pa. Aug. 31, 2010).

160. The Supreme Court reversed class certification in *Comcast* because the damages element of the antitrust violation could not be proven using common, classwide proof. The problem with plaintiffs’ case in *Comcast* was not limited to McClave’s model’s not fitting one out of four possible liability theories, as Plaintiffs assert. The problem was that McClave’s

model did not reliably measure the damages for each class member caused solely by the only viable liability theory. *Comcast*, 133 S. Ct. at 1433.

161. The Supreme Court's decision in *Comcast*, as applied by the Seventh Circuit in *Parko*, sets forth the standard that Plaintiffs must meet. For the reasons below, the Court finds that Plaintiffs have not met that standard.

II. CLASS CERTIFICATION MUST BE DENIED BECAUSE PLAINTIFFS FAILED TO MEET THEIR BURDEN TO PROVE *COMCAST'S* AND *PARKO'S* REQUIREMENTS.⁴

A. Plaintiffs' Proposed Methodology of Proving Impact and Damages Does Not "Fit" Their Theory of Liability.

162. Plaintiffs' proposed methodology of proving impact and damages does not "fit" their model of liability because it fails to "measure only those damages attributable to [their] theory." *Comcast*, 133 S. Ct. at 1433 ("[A]t the class-certification stage (as at trial), any model supporting a plaintiff's damages case must be consistent with its liability case, particularly with respect to the alleged anticompetitive effect of the violation.") (internal quotation marks omitted).

163. Plaintiffs premised their case, and class certification, on coordinated "production cuts." (*See, e.g.*, Tr. I 8:8-9:19.) But Plaintiffs neither analyzed whether Defendants actually cut production nor offered a methodology by which production cuts could be determined at trial. Plaintiffs' failure to "tie [their] theory of antitrust impact to a calculation of damages" dooms

⁴ As explained during the hearing, the Court's denial of Defendants' *Daubert* motions does not resolve class certification. (*See* Tr. III 287:22-23 (the *Daubert* "door is left open for well-prepared and qualified experts to get something spectacularly wrong").) *See also Comcast*, 133 S. Ct. at 1431 n.4 (finding that defendants' failure to raise *Daubert* challenge did not prevent defendants from challenging class certification); *In re Hydrogen Peroxide Antitrust Litig.*, 552 F.3d. 305, 323 (3d Cir. 2008) (even if "the court holds the testimony should not be excluded, under *Daubert* or for any other reason," expert testimony should never be "uncritically accepted as establishing a Rule 23 requirement").

their bid for class certification under *Comcast* and *Parko*. See *Comcast*, 133 S. Ct. at 1433 (internal quotation marks omitted); *Parko*, 739 F.3d at 1087.

164. Solow opined that antitrust impact can be shown where “overall steel production was lower than it otherwise would have been had the coordinated reductions in furnace output not taken place” (JX-010 ¶ 42; see also Tr. I 136:12-17), but he made no attempt to determine whether overall steel production was lower than it otherwise would have been, even in the aggregate (Tr. I 136:18-21). By his own admission, Solow cannot show: what the aggregate production would have otherwise been absent the alleged conspiracy (Tr. I 136:2-21); whether the production of any individual steel product was lower than it otherwise would have been (Tr. I 139:24-140:4, 143:2-6, 143:14-144:4); or whether the price of any individual steel product was higher than it otherwise would have been absent the alleged conspiracy (Tr. I 149:24-150:1). Without but-for production to compare to actual production, Plaintiffs have not offered a common methodology for determining that “production cuts” impacted any member of the class, let alone every member. These admissions doom Solow’s analysis even accepting his unsupported assertion that hundreds of steel products in the proposed class are supply side substitutes.

165. Solow testified that trying to determine what the but-for world would have been in the class period “was Dr. McClave’s job.” (Tr. I 151:11-13.) But McClave also failed to analyze but-for production. McClave’s model does not attempt to measure directly any alleged “production cuts.” (Tr. II 302:22-304:10 (claiming including production would “taint” the model).) McClave did not establish the but-for competitive level of production, even in the aggregate (388:13-15 (testifying that this was “not germane” to his damage analysis).) He does

not know if any defendant increased or decreased production during the class period or whether defendants' respective production even moved in the same direction. (Tr. II 388:20-389:2.)

166. Instead, McClave's model tries to account for production cuts indirectly, purporting to control for all other factors that affected price over time. (Tr. II 302:22-303:2; JX-005 at 6.) But production cuts are not a black hole that can be measured only by the universe around it. McClave could have measured production cuts directly, but he chose not to. Hausman testified that modeling the difference between actual production and but-for production is "done all the time," using economic techniques that have been around since World War II and that are standard in every textbook. (Tr. III 31:2-11, 58:22-59:10.)

167. As detailed below, McClave's attempts to model indirectly the effects of "production cuts" also fail. For example, McClave's "dummy variable" model attributes to the alleged "production cuts" all differences between the class period and the benchmark periods that are not accounted for by his so-called explanatory variables. (JX-005 at 6.) But his failure to include important demand and cost factors that affect price falsely attributes differences in those other factors to the alleged conspiracy. (Tr. III 17:3-18:18.) The indirect model thus "identifies 'damages' . . . that are not the certain result of the wrong." *See Comcast*, 133 S. Ct. at 1434 (internal quotation marks omitted).

168. Neither Solow's theory of impact nor McClave's damages model "fits" Plaintiffs' liability theory because neither measures impact or damages caused only by the alleged "production cuts," and class certification must be denied. *Comcast*, 133 S. Ct. at 1431, 1433 (McClave's model did not meet Rule 23(b)(3) test because it "failed to attribute damages resulting from [the liability theory]" and therefore plaintiffs could not "possibly establish that damages are susceptible of measurement across the entire class"); *Parko*, 739 F.3d at 1087 ("The

plaintiffs in this case have presented no theory, let alone credible evidence, of a connection between the leaks [and] property values, or between specific defendants and the leaks and property values, that would justify a class action on behalf of all the property owners.”).

B. Plaintiffs Failed To Establish that Common Evidence Exists To Prove Impact Across the Entire Class.

169. Even if Plaintiffs had offered a methodology by which production cuts could be determined at trial, they cannot establish, as they must, that they can prove impact “through evidence that [is] common to the class rather than individual to its members.” *Comcast*, 133 S. Ct. at 1430; *accord Hydrogen Peroxide*, 552 F.3d at 311-12.

170. Neither Solow nor McClave even tried to determine whether a reduction of aggregate furnace output would result in the reduction of production, and thereby impact a purchaser, of any particular finished product. (Tr. I 143:14-144:3; Dkt. # 466; Tr. II 387:19-389:2.) Solow confirmed that to determine whether the alleged “production cuts” would result in a reduction of the production of any particular finished product, he would need to look at both supply and demand—which he expects would differ across products—for each individual steel product. (Tr. I 143:2-6.) This product-by-product analysis is the antithesis of the common proof of impact required under Rule 23. *See Hydrogen Peroxide*, 552 F.3d at 313-14 (vacating class certification and remanding for the lower court to consider expert testimony that “[t]he existence of supply and demand characteristics that [were] specific to . . . various grades and uses require[d] individualized assessment of the impact of the alleged conspiracy at least across these different grades and uses[, and therefore,] a finding of class-wide impact from the alleged conspiracy [could not] be inferred from the mere fact of the conspiracy and from common evidence”); *accord Comcast*, 133 S. Ct. at 1431 n.4, 1435 n. 6 (observing that classwide

damages are not established if effects of anticompetitive conduct vary across different geographic markets).

171. Solow's structure-conduct-performance methodology is not capable of either proving that the alleged conspiracy had any effect or demonstrating the effect of an output reduction on any individual customer, and therefore it cannot be used to establish classwide impact. (Tr. I 159:7-14.)

172. And even if Solow's supply side substitution theory could somehow spread the effect of production cuts that Plaintiffs have no common methodology for establishing in the first instance, Solow has failed to establish that the hundreds of diverse steel products in the proposed class in fact are supply side substitutes.

173. If significant supply side substitution existed, "margins should be approximately equal across steel products and they should . . . converge together." (Tr. III 34:14-22.) Solow agreed that producers of multiple finished products "would want to equalize the marginal revenue per [] ton of steel." (JX-056 at 245.) *See U.S. Anchor Mfg., Inc. v. Rule Indus., Inc.*, 7 F.3d 986, 997 (11th Cir. 1993) (rejecting a market definition based on supply side substitution because it "defies logic to suggest that a rational supplier would switch from selling [more profitable products] to selling [lower margin products], even assuming that the lower [margin products] would yield significant supranormal profits"). But Solow did no work to examine margins at all in this case. (Tr. I 163:17-164:2.) Nor have Plaintiffs offered any other evidence about margins or the relative profitability of the different steel products in their proposed class. (*See, e.g.*, Tr. I 233:9-11 (Wright testimony that he has no knowledge about profitability of Defendants' different steel products).)

174. According to Solow, for prices between end products to be linked through supply side substitution, a producer must also be able to shift productive assets costlessly in a short period of time from making one product to making another product. (Tr. I 165:2-166:8; JX-268 ¶ 561a.) Actual production shifts are required to “show that no nonproduction barriers prevent” supply side substitution. (Tr. I 168:6-18; JX-268 ¶ 561b.) But Solow did no work to establish whether the Defendants actually shifted production among products, let alone whether shifting could be done quickly and costlessly, as required by his own treatise. (*See*, Tr. I 166:12-167:16.)

175. To the extent shifting was feasible, it was expensive and time-consuming—not costless and quick, as required for supply side substitution. (Tr. II 497:12-25.) Profit margins for the finished steel products in the proposed class did not converge as they would if significant supply side substitution existed, but varied and diverged widely throughout the class period. (Tr. III 20:3-9, 34:23-35:3, 36:9-40:8.) The testimony and other evidence in the case belie Solow’s unsupported claim that supply side substitution tightly links the prices of all products. The Defendants’ ability to shift among products was limited, even “trivial.” (Tr. II 443:4-6, 453:6-455:20, 454:7-24, 497:12-25 (testimony by Pushis about limitations at SDI); Tr. II 532:23-533:9 (testimony by Roudabush about limitations at U.S. Steel); Tr. III 22:1-16; JX-045 at 203:11-13; JX-268 ¶¶ 538, 561b (citing *United States v. Bethlehem Steel Corp.*, 168 F. Supp. 576 (S.D.N.Y. 1958) (“The evidence establishes that the defendants’ production flexibility or mill product line theory is indeed pure theory. In practice steel producers have not been quick to shift from product to product in response to demand. Moreover, the evidence establishes that the continuing relationships between buyers and sellers in the steel industry make such shifts unlikely.”)).)

176. Defendants' and Hausman's testimony in 2001 in Section 201 proceedings before the ITC does not save Solow's supply side substitution analysis. Those proceedings were not about the effects on individual customers of steel products. (Tr. I 178:14-19; Tr. III 45:1-17.) To the extent the proceedings are relevant at all, the ITC found no price linkages for long products and only limited price linkage for flat products. (Tr. III 20:10-13, 44:2-6.) That is not proof of impact.

177. McClave also fails to establish common proof of impact for any member of the class: "If you ask can that model be used to calculate a particular customer's overcharge, my answer would be no." (Tr. II 382:16-22.) To the contrary, his model by design calculates only a single, average impact across all class members. When asked how his model shows impact across the class, McClave relied on Solow's supply side "economic theory" that firms will shift production to higher margin products to the extent they are able to do so. (*See id.*) In addition, the failure of McClave's model reliably to measure damages classwide means it cannot prove classwide impact, either.

178. Nor do Defendants' general statements about industry discipline establish common impact. (*See, e.g.*, Tr. I 8:8-9:19; 164:9-12; Tr. II 472:21-473:25.) Even if these statements were somehow proof of conspiracy, they are not common evidence of the separate, necessary element of impact, and none of them indicates whether the alleged production cuts caused the production level of any individual product to be different than it otherwise would have been. (Tr. I 173:21-174:1.) *See Comcast*, 133 S. Ct. at 1430; *accord Hydrogen Peroxide*, 552 F.3d at 311-12 ("Plaintiffs' burden at the class certification stage is . . . to demonstrate that the element of antitrust impact is capable of proof at trial through evidence that is common to the class rather than individual to its members.").

179. Plaintiffs' argument that Defendants' statements are common evidence is another version of Plaintiffs' contention that common proof of conspiracy alone meets the predominance test notwithstanding individual issues of impact and damages. That is insufficient under *Comcast* and *Parko*.

C. Plaintiffs Failed To Establish that a Common Methodology Exists To Prove Damages for Each Member of the Proposed Class.

180. Plaintiffs relied solely on McClave's regression analyses to show that a common methodology exists to prove damages classwide. (Tr. I 7:17-16:7.) But just as in *Comcast*, "it is clear that, under the proper standard for evaluating certification, McClave's model falls far short of establishing that damages are capable of measurement on a classwide basis" and class certification must be denied. *Comcast*, 133 S. Ct. at 1433.

181. McClave admits that the model on which he relies cannot be used to determine the price that any individual class member would have paid for steel products absent the alleged conspiracy. (Tr. II 382:16-18.) Without a reliable but-for price, McClave's model cannot determine the amount of overcharge for any individual customer. (Tr. II 383:19-384:1, 417:7-10.) Instead, McClave's model generates a single, average estimate of impact, assuming—rather than seeking to prove—that impact is common. This failure alone precludes class certification.

182. McClave admits that his model provides only "estimated overcharges that are aggregated across all class members within each of the flat and long categories" and cannot be used to calculate a "meaningful or reliable" overcharge for any particular customer." (Tr. II 381:14-383:1.) Plaintiffs therefore have offered no proof that common evidence can be used to prove damages for any class member—let alone all class members—and class certification must be denied. *Comcast*, 133 S. Ct. at 1431 n.4.

183. Even if McClave's models were capable of measuring damages for each class member, his econometric failings independently preclude class certification. They demonstrate that his models are unpersuasive and cannot withstand the rigorous analysis required to support class certification. *Comcast*, 133 S. Ct. at 1433 (rejecting the notion that "at the class certification stage *any* method of measurement is acceptable so long as it can be applied classwide, no matter how arbitrary the measurements may be," because "[s]uch a proposition would reduce Rule 23(b)(3)'s predominance requirement to a nullity").

184. McClave's modeling is improper because structural breaks exist between each of the pre-conspiracy, conspiracy, and post-conspiracy periods, meaning that the relationship between price and important variables does not remain constant across any two of the three periods. (Tr. III 64:10-20; 68:22-69:23; Dkt. # 471-6 at 23.) The Chow test confirms the existence of these structural breaks. McClave admits that the post-period, which contains the Great Recession, is "very different." (Tr. I 305:19.) McClave himself explained in the *Urethane* case that the relationship between price and the relevant explanatory variables must remain similar in the benchmark and class periods in order for a dummy variable model to produce reliable estimates. (DX-094 at 2888:21-2889:1.)

185. McClave's model also cannot support class certification because it blends widely-varying transaction prices into single averages. (Tr. II 365:15-20; Tr. III 59:20-60:2; JX-002 at 13-15.) Measuring average pricing data "does not indicate whether each putative class member suffered harm In other words, it is not a methodology common to the class that can determine impact with respect to each class member." *Reed*, 268 F.R.D. at 590-91; *see also In re Graphics Processing Units Antitrust Litig.*, 253 F.R.D. 478, 493 (N.D. Cal. 2008) (holding that plaintiffs failed to meet their burden where their expert lumped all of the data points together,

which “compromises the ability to tease meaningful relationships out of the data”). McClave’s lumping of diverse products into highly aggregated product categories and rolling up the transactional data into monthly averages is like throwing very different “ingredients” into a blender and then concluding that because the blend comes out looking the same, all of the ingredients must also be the same.

186. Further, McClave failed to account for non-conspiratorial factors causing price variation, and so falsely attributed them to the alleged conspiracy. McClave’s model fails to account for important cost factors. For example, zinc, which accounts for 4 to 5% of the cost of galvanized products, tripled in cost between 2005 and 2006, but McClave’s model would attribute at least some of any related rise in prices for galvanized products to the alleged conspiracy. (Tr. II 404:10-409:7.) The model therefore is unable to distinguish injury resulting from illegal action from price effects resulting from any other cause, meaning it cannot accurately measure impact or damages. *Parko*, 739 F.3d at 1086. Because zinc is an input into galvanized products but not other steel products, an increase in zinc prices would cause different effects across different products. And McClave failed to control for major sources of steel demand like appliances or oil and gas applications. (Tr. III 85:11-86:3; 88:21-89:20.)

187. In addition to the Chow test, McClave’s model also fails the Hausman test and the F-test with a “very high degree of statistical certainty,” which confirms that the model’s coefficients are biased and that the model is incorrectly specified. This demonstrates that the model is an unreliable method of showing common impact. (Tr. III 86:20-87:15, 88:24-90:2, 107:9-111:20); *see also* Dkt. # 471-6 at 45.)

188. Finally, the false positives resulting from McClave’s model confirm the fatal errors that preclude class certification. McClave’s model predicts over \$2.5 billion in false

positive damages in the pre-period in 2002 and 2004, and predicts substantial overcharges for steel product purchases made during the class period at contract prices negotiated before the alleged conspiratorial behavior. (Tr. I 20-22; Tr. III 99:5-107:5; Dkt. # 471-6 at 38-39.)

189. McClave's model detects "injury where none could exist" and therefore cannot serve as common evidence of impact or a common methodology to calculate damages. The existence of false positives "shred[s] the plaintiffs' case for certification" because "common questions of fact cannot predominate where there exists no reliable means of proving classwide injury in fact." *Rail Freight*, 725 F.3d at 252-53.

190. McClave's claim that he will fix the false positives problems after the class is certified (*see, e.g.*, Tr. III 421:2-422:22) is an admission to the flaws of his model and mistakes Plaintiffs' burden. The same excuse was rejected by the D.C. Circuit in *Rail Freight*:

It is not enough to submit a questionable model whose unsubstantiated claims cannot be refuted through a priori analysis. Otherwise, "at the class certification stage any method of measurement [would be] acceptable so long as it [could] be applied classwide, no matter how arbitrary the measurements [were]."

Rail Freight, 725 F.3d at 254 (quoting *Comcast*, 133 S. Ct. at 1433.)⁵

* * * *

191. In *Parko*, unlike *Butler II* but like *Steel*, Judge Posner observed that "this doesn't appear to be one of those small-claims suits that as a practical matter can proceed only as a class action (e.g. overcharges of \$5.50 for rental cars). The damages may not be huge, but may well be sizable enough for individual (or joined) suits to be a feasible alternative to a class action."

⁵ Because Plaintiffs cannot determine which class period purchases were made pursuant to pre-existing contracts or when and how the pricing of those purchases were negotiated or adjusted, they also fail to meet the ascertainability requirement of Rule 23. *See In re Copper Antitrust Litig.*, 196 F.R.D. 348, 353, 358 (W.D. Wis. 2000) (stating that the requirement that a class definition be "precise, objective, and presently ascertainable" is implicit in Rule 23 so that an identifiable class is defined), *aff'd sub nom. Loeb Indus. v. Sumitomo Corp.*, 306 F.3d 469 (7th Cir. 2002).

See Parko, 739 F.3d at 1086. This reasoning applies with greater force here, to a putative class including the largest and most important purchasers of steel products, such as automakers and steel service centers, who purchase millions, tens of millions, and hundreds of millions of dollars of steel products annually. These purchasers have both the wherewithal and the incentive to bring a claim if they believe they have been overcharged. Even the named plaintiffs, whose purchases are dwarfed by those of many of the class members they seek to represent, collectively bought \$21 million in steel products from defendants over the alleged class period. (JX-142 at Ex. 59.)⁶

192. Although unnecessary for claims of this magnitude to proceed, class certification would empower the named plaintiffs, regardless of the merits, to transform their individual monetary claims into a multi-billion dollar gun to the head of the Defendants. *See, e.g., Szabo v. Bridgeport Machines, Inc.*, 249 F.3d 672, 675 (7th Cir. 2001); *accord Parko*, 739 F.3d at 1085; *In re Bridgestone/Firestone, Inc.*, 288 F.3d 1012, 1015-16 (7th Cir. 2002); *In the Matter of Rhone-Poulenc Rorer, Inc.*, 51 F.3d 1293, 1299 (7th Cir. 1995). For these same reasons, Plaintiffs also fail to meet the requirement of Rule 23(b)(3) that a class action be “superior to other available methods for fairly and efficiently adjudicating the controversy.” *See Murray v.*

⁶ The named Plaintiffs also bought entirely different products than the class members they seek to represent (like large automotive manufacturers). Thus, the named Plaintiffs’ claims do not meet the typicality requirement of Rule 23(a)(3). (E.g., JX-312 at 119:7-121:10, 168:12-23 (Plaintiff Alco Industries purchased steel plate in four grades for use in pressure vessel applications); JX-345 at 31:8-33:19 (Plaintiff Gulf Stream purchased rebar for construction applications); JX-324 at 86:15-89:16, 96:20-97:20 (Plaintiff Wilmington Steel bought steel for use in counterweights for elevators, components of cherry pickers and components for nuclear applications); JX-298 at 118-19 (Plaintiff Standard Iron Works purchased structural steel for use in commercial construction applications); JX-276 at 15-77 (Plaintiff Eastern States Steel purchased rebar and other bar products for use in commercial and residential construction applications). *See Retired Chi. Police Ass’n v. City of Chicago*, 7 F.3d 584, 597 (7th Cir. 1993); *Oshana v. Coca-Cola Co.*, 472 F.3d 506, 514 (7th Cir. 2006); *Hickey v. Great W. Mortg. Corp.*, No. 94 C 3638, 1995 WL 121534, at *9 (N.D. Ill. Mar. 17, 1995) (stating that typicality requirement is not met where “proof of [named plaintiffs’] claims will not necessarily prove all of the members’ claims”); *accord Exhaust Unlimited, Inc. v. Cintas Corp.*, 223 F.R.D. 506, 511 (S.D. Ill. 2004) (using the same test in an antitrust case).

GMAC Mortg. Corp., 434 F.3d 948, 953 (7th Cir. 2006) (class actions are “designed for situations . . . in which the potential recovery is too slight to support individual suits, but injury is substantial in aggregate”).

193. Plaintiffs have failed to meet their burden to prove by a preponderance of the evidence that (1) common evidence exists to prove that each class member was impacted by the alleged conspiracy, (2) a common methodology exists to measure each class member’s damages, and (3) their proposed methodology for proving impact and damages “fits” their theory of liability and “measure[s] only those damages attributable to that theory.” *See Comcast*, 133 S. Ct. at 1433; *Parko*, 739 F.3d at 1086-87; *accord Rail Freight*, 725 F.3d at 252-53. Accordingly, Plaintiffs’ motion for class certification must be denied.

III. PLAINTIFFS HAVE NOT SOUGHT, AND THE RECORD DOES NOT SUPPORT, CERTIFICATION OF ANY OTHER CLASS.

194. I also find that class certification is not proper for any sub-class. Defendants opposed the motion for class certification that Plaintiffs actually filed, and I made my decision based on the evidence actually presented. Plaintiffs have not sought certification of any sub-class of products or moved under Rule 23(c)(4) for a liability-only class; no such motion was briefed or contested at the hearing, and none is before me for consideration. Even if they had, Plaintiffs’ fundamental failures of proof also doom certification of any sub-class of products or liability-only class that Plaintiffs could propose or that could be created by the Court *sua sponte*.

195. No sub-class of products could circumvent, for example, Solow’s and McClave’s joint failure to offer any method of determining but-for production or price levels, Solow’s admission that he would have to analyze supply and demand on a product-by-product basis to determine impact, or McClave’s admission that his model is incapable of proving overcharges for any individual plaintiff.

196. Further, antitrust liability requires proof of individual impact. Plaintiffs' experts' admissions preclude any finding that their methodologies can be used to calculate impact on individual customers of steel products, which precludes class certification. Had Plaintiffs moved for certification of a conspiracy-only class—a subset of liability—leaving both impact and damages for individual trials, that motion would fly in the face of *Comcast* and *Parko*, which each reversed class certification in its entirety. And even a conspiracy-only or partial-liability class would be precluded by Plaintiffs' failure to offer a classwide method of proving at trial the “production cuts” on which their liability theory is premised.

CONCLUSION

197. “The steel industry does not sell ‘steel’; it sells sheets, bars, and other shapes, of varying thickness, rigidity, heat resistance, strength, ductility, weight and so forth—in short a large variety of product types.” Richard A. Posner, *Antitrust Law* 65 (2d ed. 2001). Plaintiffs' proposed class includes purchasers of hundreds of diverse steel products with differing supply and demand characteristics, production levels, prices, and relative profitability. (Tr. I 145:11-16; Tr. I 163:7-164:2.) Plaintiffs have failed to meet their burden of establishing that either impact or damages for each class member can be proved with common evidence. Class certification therefore is DENIED.

Dated: May 12, 2014

Respectfully submitted,

By: /s/ Michelle S. Lowery
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CERTIFICATE OF SERVICE

I, Michelle S. Lowery, an attorney, hereby certify that on May 12, 2014, I caused a true and accurate copy of the foregoing **DEFENDANTS' PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW** to be served via the Court's CM/EMF system, which will serve the filing via e-mail notification to all counsel of record.

/s/ Michelle S. Lowery

MICHELLE S. LOWERY